

Vhf-Uhf DIGEST

The Official Publication of the Worldwide TV-FM DX Association

MAY 1999



TV/FM DX PARADISE!

And look who lives there...



WORLDWIDE TV-FM DX ASSOCIATION
PO BOX 501 - SOMERSVILLE, CT 06072



OPINIONS EXPRESSED IN THIS PUBLICATION ARE THOSE OF THE INDIVIDUAL CONTRIBUTOR AND DO NOT NECESSARILY REFLECT THE VIEWS OF THE PUBLISHER OR BOARD OF DIRECTORS. WE RESERVE THE RIGHT TO EDIT MATERIAL TO MEET PUBLISHING STANDARDS. UNLESS PREVIOUSLY AGREED UPON IN WRITING, ALL MATERIAL SUBMITTED FOR PUBLICATION IN THE VHF-UHF DIGEST BECOMES THE PROPERTY OF W.T.F.D.A.

REPRODUCTION OF MATERIAL FROM THE VHF-UHF DIGEST WITHOUT PERMISSION OF W.T.F.D.A. IS PROHIBITED. INDIVIDUALS AND OTHER ORGANIZATIONS ARE GRANTED SUCH PERMISSION PROVIDING PROPER CREDIT IS GIVEN TO THE SOURCE.

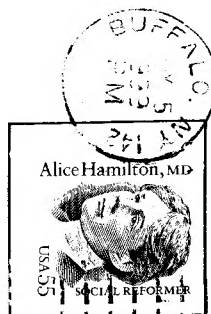
ANNUAL DUES: \$24/year: U.S. addresses

\$26/year* to Canada

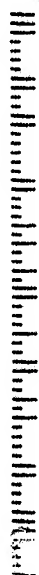
(payable in \$38/year* for airmail service to all other countries. (*Payable in U.S. funds)

first class mail

11/99
BILL NOLMAN
11 HIDDEN OAK DR
FARMINGTON CT 06032



06032-2735 06



WORLDWIDE TV-FM DX ASSOCIATION

Serving the VHF-UHF Enthusiast

THE VHF-UHF DIGEST IS THE OFFICIAL PUBLICATION OF THE WORLDWIDE TV-FM DX ASSOCIATION, DEDICATED TO THE OBSERVATION AND STUDY OF THE PROPAGATION OF LONG DISTANCE TELEVISION AND FM BROADCASTING SIGNALS AT VHF AND UHF. WTFDA IS GOVERNED BY A BOARD OF DIRECTORS: TOM BRYANT, GREG CONIGLIO, BRUCE HALL, DAVE JANOWIAK, AND BILL THOMPSON.

Editor/Publisher: Bill Thompson

Circulation: Mike Bugaj Comptroller: Dave Janowiak

Editorial Staff: Tom Bryant, Greg Coniglio, Victor Frank, George W. Jensen, Jeff Kruszk, Russell Miller, Fred Nordquist, Doug Smith, Thomas J. Yingling, Jr., John Zondlo

ANARC Representative: Jim Thomas Back Issues: Dave Nieman

Original Cover Design: Harry Hayes

FROM THE STAFF:

WTFDA HONORS COOPER: The WTFDA Board of Directors has acknowledged nearly a half-century of contributions to the DXing fraternity by granting a *LIFETIME MEMBERSHIP* to Bob Cooper. Cooper founded this club's predecessor, the American Ionospheric Propagation Association (AIPA) in the early 1950s; and eventually turned his love for DXing into a career. His technical journals are legendary...so are many of his DX catches...such as UHF tropo from Boston to Oklahoma City. Although Bob was not involved with the creation of WTFDA, he subsequently became a member and column editor. Now retired, and living in New Zealand, Bob still actively DXes, but has chosen to maintain a low profile and fully enjoy his leisure time. You'll be reading more about his travels and accomplishments here in the *VUD*. Congratulations Bob...and in behalf of all DXers...THANKS!

CONVENTIONS:

WTFDA: Our 1999 Convention will be hosted by Rick Shaftan July 16-18 in NW New Jersey. Lodging information and full details appear in an ad elsewhere in this issue. Pre-registration, which includes food and beverages, will be \$25. It's time to do that NOW. Make your check payable to: **MountainTop Media** and mail to Box 578, Sparta, NJ 07871. Additional lodging information also appears in last month's "From The Staff".

IRCA '99 / DecalcoMania: Holiday Inn-Boardwalk Hotel, Las Vegas, Nevada, June 25-27 1999. Reservations 1-800-635-4581 (mention code I-R-C). Convention registration - \$35. SW Airlines is offering a 10% discount 1-800-433-5368 (mention code LO199). Host is Mike Sanburn, PO Box 1256, Bellflower CA 90707-1256, 310-614-1444.

NRC: Holiday Inn, Bridgeport WV on Sept 3-6, 1999. Reservations 1-304-842-5411, \$70.95 for two double bed room, no limit on how many in a room. Convention registration - \$35. Host is William Swiger, One Casey Ln, Bridgeport WV 26330, 304-842-4635.

ODXA: "Radio Fest 99" will celebrate the 25th anniversary of the Ontario DX Association, Canada's largest radio listeners' club (which also embraces the interests of TV/FM DXers). September 24-26 at the Ramada Inn & Convention Centre, Oakville, Ontario. For reservations call (905) 849-5950 or toll free 1-800-357-0880, Web <www.ramada-oakville.com>. A special rate of Cdn\$82 per night for Radio Fest 99 is available. More details at a later date.

NEXT MONTH: As E-skip season fires up (we hope!) we'll update you on several great web resources that may help you identify your Mexican FM and TV catches. GoodDXing to all!



WTFDA MAILBOX

P.O. Box 501

Somersville, CT 06072

Mike Bugaj

Ikcon@netcom.com

THERE'S E-SKIP IN THE AIR!

It's May, and the skip is out there...lurking. I can feel it. Somebody, somewhere is going to be reporting an opening this month. I know it. It just might be one of these NEW WTFDAers. It might be Aaron Mitterling from Fort Wayne, IN, or Alexeis Marreros Cruz from Holguin, CUBA, or Ryan Grabow from Patchogue, Long Island, NY. And if it's not one of the above, then it's almost certainly going to be one of our fine WTFDAers who have renewed for another year: Andy Bolin, Scott Steenhausen, Carlton Howington, Bill Dvorak, William Draeb, Edward Cotton, Phil Sullivan, Pat Dyer, Frank Drobny, Neil Joslun, Bill Thompson, Thomas Christman, Joseph Smith, Pete Taylor, Bill Hepburn, Gerard Hart, Alan Dunn, Ed Houchins, Harry Hayes or David Cox. In WTFDA member news, Matt Sittel checks in with the news that he and his new wife have made the move from Georgia to Bellvue, NE, just south of Omaha, where Matt hopes to get back into the meteorological field and start Dxing again. A postcard from Rod O'Connor shows Rod making the move from Kodiak, AK all the way back to Southwest Harbor, ME. He just flew in...and are his arms tired! (Sorry...couldn't resist that!)

A very special "welcome back" goes out to DX Great and satellite TV guru Bob Cooper, who makes his home now in Mangonui, New Zealand. If there was one DXer that most of us old-timers would like to see back in the WTFDA, Bob would be the one. Yes, Bob is back, and the club has made it possible for him to be part of the WTFDA for years to come! I am glad that Bob still wants to be part of us. Thanks go to the WTFDAers and a few ex-WTFDAers who let it be known that they still missed him after all these years. You can read much more about Bob elsewhere in this VUD.

Aaron Mitterling introduces himself to all of us: "Hello! My name is Aaron. I am currently a college student at ITT Technical Institute in Fort Wayne, Indiana. I have been studying electronics. I am 19 years old and live in an apartment with a roommate. I used to live in Warsaw, Indiana (45 miles west of Ft. Wayne). It has been almost 5 years since I first started Dxing, when I received my first Texas stations via "sporadic E" skip. I also enjoy tropo, but Es is what I enjoy most of all. Since 1994, I have logged and recorded many of the openings I have gotten. I mainly observe Es on the low VHF band and FM stations. I find it very exciting!" (Keep checking ch.2 for scratchy lines, Aaron. It will happen soon...Mike)

Ryan Grabow sent along a note to tell us that he TV Dxes with an RCA 19" color TV, a JVC HiFi VCR where he has most of his DX on tape, and a Radio Shack VU-110XR Rooftop antenna with an Archer rotor. His all time distance record is KSNW Wichita KS at 1370 miles. (Ryan, you should have some great coastal tropo this summer from NC/SC or NS...it's great fun -Mike).

WHY NOT SPONSOR A DXER? A letter arrived in the WTFDA Mailbox the other day, written in Spanish with a CUBA postmark. It was from Alexeis Marreros Cruz, a 23 year old FM DXer from Holguin, Cuba. Alexeis wrote to tell us of a super FM tropo opening he had on Feb 20th from the state of Florida, as far north as Jacksonville. I was impressed. We posted his loggings on the amfntvdx email server, and several WTFDA members responded. Alexeis stated that he would like to join the WTFDA, but because of the existing economic situation he could not pay in US dollars. Doug Smith wondered aloud why we as individuals can't sponsor needy DXers in the US and abroad. Well, the answer is that it *does* happen... Alexeis' membership has been paid for a year and he is now a WTFDAer. Now, here is where *you* can play a part. What I need is a list of people who would be available to sponsor someone, from another country or from America, who dxes but cannot afford a WTFDA membership. Some of us have lots of money. Many of us do not. If you think you might be able to spare a few dollars a year to help some worthy dxer, let me add you to the my list, and if a special request arrives in the mail one of these days, I'll contact you... By the way, Alexeis' address is c/Maximo Gomes #47, San Andres, Holguin, 84200 CUBA. If you can write a little Spanish, drop him a note and welcome him into the club. Thanks.

IRC Chat Tues/Fri Nights 10pm EST. on the net...IRCNET Channel
#WTFDXA.

Be there or be square!

CHILE TODAY, HOT TOMORROW? Mike Cherry had some interesting comments regarding F2 conditions: "With F2 propagation just starting to permeate North America, there is renewed emphasis on monitoring for foreign TV signals. Also, several Muzak-type (elevator) music services in Chile have been using a number of frequencies in the 47.800 - 47.950 range and ...these are being reported widely. They are wide-band FM (same as FM broadcast) and can be heard on a number of receivers. Last solar cycle I got a number of these in full stereo on my Kenwood RZ-1." F2 from Chile? You bet!

GET READY TO PARTY! Michael Condon is hosting a Radio and TV get-together at his place at North Star Valley, 40 miles north of Madison, WI on June 19, 1999. The house will be open from 9am and food and refreshments will be served. Dinner will be devoured at the Crest Wood Inn. Mike will arrange for a tour of his local radio station and can also arrange lodging upon request. If you bring your dx photos and scrap books, Mike will scan them to disk for you to take back home. This sounds like fun! Check out Mike's famous lightning-attracting tower! Mike's email address is michael.condon@juno.com.

DTV PROPAGATION NEWS. And yet more dtv news from Karl Zuk taken from the qth.net email list. Karl writes: "Last night (3/10) at the CBS Broadcast Center in New York, there was a meeting of The Society of Motion Picture and Television Engineers (SMPTE) regarding CBS' efforts to lunch DTV/HDTV.

The point of interest to this list was the propagation studies done by Bob Seidel and his crew using a specially outfitted truck to measure field strength. They had several methods of decoding the DTV signals along with wonderful test gear. The bottom line was that DTV will have nearly complete coverage in the NYC area up to 65 miles from the site.

One of Bob's peers, Bob Ross, was using a Panasonic DTV set and a Radio Shack double bow tie for UHF and picked up WCBS-DT ch56 about 35 miles away from our transmitter site on the Empire State Building in an area with blocked terrain to line-of-sight. The system seems to work well and is more robust

than NTSC in heavy ghost areas such as the concrete canyons in Manhattan. We Dxers will soon be accustomed to terms like "I got the signal to lock".

There has not been any experience yet with DTV versus DTV co-channel interference; but the CBS field strength tests showed that an adjacent channel NTSC broadcast can take its toll...in our case WLNY ch55 on Long Island...infringing on our WCBS-DT broadcasts on ch56. The signal either locks in or it doesn't. Another interesting effect is how sets deal with audio lip lock. If you have two different models of TV from different manufacturers, the audio nearly never will be in sync between the two sets because slight differences in processing will change the delay of the DTV signal

through the set. Pictures will not all arrive at precisely the same time to everyone anymore. In the words of Bob Ross, the idea of sending out an accurate time pip on the hour is almost impossible. Also, it seems that a new generation of chipsets for these receivers will greatly add to the ability to correct for profound errors in data, like severe and multi multipath. Using indoor antennae, you will often find the best signals will come via a bounce.

Ross is also getting good reception by aiming a small yagi nearly straight up in his windowed office in Manhattan. It should be a very interesting new world for Dxers. Channel 3 WBBM-DT in Chicago will be a very interesting catch for E-skip. The bottom line is: The DTV transmission system can take a lot of abuse and still produce drop-dead amazingly wonderful pictures."

LAST, BUT NOT LEAST... Bruce Elving comes through with another progress report on the new and improved FM Atlas. As of April 10th, he was almost done with corrections to the Atlas and was soon to send it off to the printer. And Jeff Kadet supplied an answer to my question in the last VUD about his vacation plans for next year. Jeff's two choices for next year are 1) Brazil and 2) Laos. Well, in my opinion there is no choice. It's Brazil all the way. Ipanima Beach, to be specific. Jorge Aloy sent me a photo of a beach in Brazil where he went on vacation. I should print it next issue. It might help Jeff make up his mind.

Have a great month and see you here next time. *Don't forget to write!* -Mike

DX Legends: Bob Cooper

Champion TV Dyer, AIPA Founder, pioneer in home satellite broadcasting

Quick...who do you think of when you hear...Bob's Tech Notes...Cadco...CATJ...UHF tropo from Boston to Oklahoma City? Without a doubt, it's Bob Cooper. For those unfamiliar with the name, Bob Cooper is a living legend in the WTFDA. Back in the early 1970s, the mimeographed VUD was full of TV DX reports, technical reports and equipment reviews all done by Bob. Then, the world of satellite TV beckoned and Bob left to explore new vistas. But he's alive, and he's well, and he still DXes.

Bob Cooper was born in 1938 in Ithica, NY. His dad was a civil engineer. Bob was 12 years old and a short wave listener studying for his general class ham license, when one day his dad brought home a Hallicrafters 7 inch TV from a trip to New York City. Ithica's television reception was awful. The closest city was Rochester, and Ithica was in a fringe area. Bob and his dad erected a 100 foot tower, put stacked channel 6 yagis on top of it with mast-mounted pre-amps, and had the best TV reception in town. And a twelve year old boy got hooked on TVDX.

The family moved to California in 1953, living first in Lafayette and later in Fresno. In Fresno, the closest VHF stations were 100 miles away. Bob rang up a TV log of over 150 stations including signed veries from double-hop stations WBZ, WCBS, WNBC, WRGB, WLWT, WRC and other East Coast double-hoppers. Triple hop was frequent from Cuba and Puerto Rico, and written verifications were received. While living in Lafayette, Bob originated and founded the granddaddy of VHF clubs, the AIPA, and the bulletins were run off on a mimeo machine at the school where Bob's mother worked as a teacher. In 1954 Bob and his family flew back to New York State where he spent some time with his friend Bob Seybold, and where Bob Seybold, in his excitement, tore both rear doors off his father's Mercury while trying to back it out of the garage.

The AIPA was the primary link between Dxers at that time. Ed Tilton, VHF editor at QST, who did a column for Radio Electronics every other month, was requested by the ARRL to quit writing for other publications and recommended Bob, then 17, be hired by Radio Electronics to do a column for them, after Bob did a column about TV Dxing for them in 1956. Bob's first job netted him \$150 every other month. It was a start. In 1957 Bob was heavily into amateur VHF, and AIPA operation was handed over to someone else.

In October 1959 Radio Electronics dropped his column and Bob saw the need for a monthly magazine devoted to TV and FM DX reception. Using money borrowed from his mother (and repaid in six months), DX Horizons was born in January, 1960. With the support of such manufacturers as Blonder Tongue and Winegard, DX Horizons grew rapidly and soon split into several distinct and separate magazines as CB Horizons, TV Horizons and Communications Horizons. In 1961 CB Horizons grew from no subscribers to 50,000 subscribers and a printing firm was needed that could handle the growth. Bob found that firm in Oklahoma City and moved there from Modesto, Calif. in 1961, and by 1963 other publications were added and employed 35 people, who spent much of their time moving to new, larger headquarters.

(Continued on next page)

In 1965 Bob sold his interest in the publishing company to his employees and moved back to California into the cable TV business, where he designed and built some of the first twelve channel systems in the world in places like Placerville and South Lake Tahoe. In 1968 he sold that business, and with a sunspot cycle peak approaching, moved to the US Virgin Islands and stayed for a year in St Croix. Then, for no particular reason, he went back to Oklahoma City to visit friends, and stayed. In his garage, Bob spent two years experimenting with and developing low noise, highly selective signal pre-amplifiers, TV signal processors etc., for cable TV. Bob became active in the WTFDA, writing technical articles and using these new cable products in his TV Dxing. He had multiple UHF dishes in his yard coupled with newly designed pre-amps. This new technology was responsible for such UHF catches as WSBK-38 via tropo. Bob formed a company called CADCO (Community Antenna Development Company), and by 1973 it had over 90 employees and a full line of cable tv products, doing custom designs for cable systems all over the United States. In 1974 he finally sold the company, which is still in business today.

In 1974 Bob saw satellite TV on the horizon. He took a couple of his best design engineers and went off to build the first low cost satellite TV receivers, and with the co-operation of Microwave Associates (M/A Com) oversaw the creation of the first private home terminal satellite equipment. And in 1978, in a deliberate attempt to kick off home satellite TV, he wrote an article for TV Guide that many people believe launched the industry. He created the first satellite industry trade shows, launched a couple of new magazines to support the new industry and became a visible spokesman for home satellite TV.

In 1979, a new sunspot cycle was arriving, and Bob moved his family to the Turks and Caicos Islands to take advantage of it. They were intending to build a home there, and were renting a place on the westernmost island of Providenciales, when the governor of the islands payed him a visit requesting that Bob set up a satellite television service for the islands like the one Bob had already set up for himself. It was built, and in return he had the 30% import duty waived for all materials Bob needed to have his new home built with products imported from the United States. It was also around this time that a representative of the Duvalier government in Haiti payed Bob a visit requesting that he help set up a satellite TV system for "Papa Doc" Duvalier. Bob and his wife were flown to Port-au-Prince where they met with both "Papa Doc" and his son "Baby Doc" and an attempt was made to convince them to construct a satellite system. A system was eventually built, with Bob acting in a consulting capacity.

It is now 1999. Bob Cooper is living in New Zealand. Why New Zealand? In Bob's words, "It is clean, green and very peaceful. I am now 60...61 soon - and there comes a time when you want to be left alone, not be answerable to others. This was and is my time."

Bob is still active in satellite TV and also in TV Dxing. He has had double hop FM into Papua, New Guinea (2,550 mi.), four and five hop low band TV Es, F2 from Russia, China, etc., and 1,800 mi tropo into Australia. He was the first person to work Europe on 6 meters, and the first to work all continents. He needs 14 more states to have worked all states. And instead of retiring, he set up and cares for a 53 channel cable TV system in his area. The story of Bob Cooper, DX legend, is far from over...

Thanks to Bob Cooper, himself, for supplying much of this information via email. Also thanks to Tom and Darryl at www.tomanddarryl.org on the web for supplying RealAudio feeds of Bob's interviews broadcast live over short wave station WBCQ, Monticello, Maine on 7.415 mhz, and the "WOKIE" Satellite Network, GE1, transponder 12, 5.7 nbm. Listen to Bob's interviews live on RealAudio on the www. And listen to Tom and Darryl on Sunday night at 2300 CST over WOKIE or WBCQ on 7.415mhz short wave. And thank you again, Bob, for allowing us to do this. Mike B.

fm/tv WEBsittings May 1999

Jim Thomas
280 E. Katsura Street
Milliken, CO 80543
oldwest@onceimage.com

The Best of the 'Best' in FM & Television Station Internet Websites.

Welcome to the first edition of FM/TV WEBsittings. This column's goal is to bring to the VUD reader, useful information. There are currently over 4000 fm websites and 400+ television websites. Our goal is to cut to the chase and find interesting and interactive websites, representing your favorite FM & TV stations.

This month's theme is - **OLDIES!!**

FM RADIO WEBSITES

WOGL Oldies98 Philadelphia

Did you know that WOGL's listeners have voted on their favorite classic oldies songs & WOGL's deejay's have collected them on their website to give you the top 500 songs of all time? Just use the 'search' bar on their site to find your favorite oldie. Even if you don't know the exact title of a song, you can enter part of the title or one word, and the search will return instances of that word in the top 500 list. Try it - it's fun!

You can also see the top 500 list in its entirety.

<http://www.wogl.com>



WOGL owns both a 1958 pink Convertible Cadillac & a 1959 pink hardtop Cadillac.

KFRC Oldies 99.7FM San Francisco

You don't have to live in the Bay area to have a chance at \$5000 every Friday. All you have to do is register with Oldies 99.7FM at their website, then listen on their RealAudio live feed every Friday at 5:00pm PDT. If you hear your name, call their toll-free number & YOU'RE A WINNER! You can also register for the World's Easiest Contest - \$1,000 given away daily.

On their website, they also feature the Teacher of the Month and the Charity of the Month in the Bay area.

http://www.kfrc.com/home_page.html

WMXJ Majic 102.7 FM Miami

Now here's one FM website with some interactivity!! This site isn't just for viewing - its also for 'doing'. Featured in their Game Room, you can check in on their Artist of the Month, which includes RealAudio sound clips of some of the artists hits, then there's the 'This Day in Music Ride'. Are you in the mood for a joke? A robot tells you the joke of the day. For the kids, they have a link to the CBS Kidzone, and, for the daring adults, they give you a chance at 'Win Big' - a jackpot slot.

<http://www.wmxj.com/fungames.html>

TELEVISION WEBSITES



Television Station WSAZ-3, Huntington, WV, celebrates 50 years this Oct. 15th.

WSAZ 3 - Huntington, WV

Fifty years of television. Anyone would agree that is quite a milestone. WSAZ Television Channel 5 went on the air October 15, 1949. The few people in the Tri-State who had TV sets were able to see the first television signal ever broadcast in this area.

The first regular show was "Stop the Music." The official opening day was Nov. 15, 1949. Their website features their historical record of 50 years of television. Page by page, you see the development of television in the Tri-State area, in words and pictures. **YOU CAN EVEN BUY THE BOOK, "FIFTY YEARS"**, online, celebrating WSAZ's anniversary.

<http://www.wsaz.com/history.html>

CHECK OUT THESE WEBSITES THAT SUPPORT FM/TV!

broadcast.com

broadcast.com

newstream.com

NEWSTREAM

MEDIA LINK

TV News

Douglas E. Smith W9WI
1385 Old Clarksville Pike
Pleasant View, TN 37146-8098
W9WI@bellsouth.net

May 1999

non-commercial station
nc no change

<http://personal.bellsouth.net/~w9wi>

Applications for new stations

St	Ch	ERP	Ht.	City	Applicant	Latitude	Longitude
AL	19^	50	313	Demopolis	WIIQ [41]	32-21-45	87-52-04
AL	44^	168.8	243	Louisville	WGIQ [43]	31-43-04	85-26-03
AL	14^	50	161	Montgomery	WAIQ [26]	32-22-55	86-17-33
CA	52^	257	645	San Jose	KICU [36]	37-29-17	121-51-59
DE	31^	250	398	Wilmington	WPPX [61]	40-02-56	75-15-01
FL	15^	215	419	Fort Myers	WBBH [20]	26-49-30	81-45-55
FL	58^	1000	491	Orlando	WKMG [6]	28-34-07	81-03-16
KY	17^	60.3	237	Louisville	WKPC [15]	38-22-01	85-49-54
LA	56^	1000	507	Lafayette	KLFY [10]	30-19-19	92-16-59
MA	52^	310	247	Norwell	WBPX [46]	42-00-45	71-05-39
ME	17^	29.7	281	Augusta	WCBB [10]	44-09-15	70-00-37
MN	40^	1000	430	St. Cloud	KPXM [41]	45-23-00	93-42-30
NJ	38^	143	448	Secaucus	WWOR [9]	40-42-43	74-00-49
NJ	29^	200	167	West Milford	WFME [66]	40-47-18	74-15-19
NM	27^	1000	1313	Santa Fe	KASA [2]	35-12-55	106-27-02
NV	40^	32.4	357	Paradise	KBLR [39]	36-00-36	115-00-20
NY	27^	500	463	Jamestown	WNYB [26]	42-23-36	79-13-44
TX	32^	350	537	Dallas	KDAF [33]	32-32-35	96-57-32
TX	27^	1000	253	Lubbock	KAMC [28]	33-30-57	101-50-54

Applications in *italics* are for backup auxiliary transmitters. The WPPX-DT [31] transmitter is to be in Pennsylvania; the WWOR-DT [38] transmitter in New York City; and the WKPC-DT [17] transmitter in Indiana.

Construction permits granted for new stations

St	Ch	ERP	Ht./Call	City	Applicant	Latitude	Longitude
AB	39n	3.82		Bow Island	CJIL [17]		
AB	15n	0.02		Hobbema	Family Ch	52-50-08	113-29-55
AL	24^	50	340	Huntsville	WHIQ [25]	34-44-13	86-31-45
AL	41^	50	185	Mobile	WEIQ [42]	30-39-33	87-53-33
AL	14^	50	161	Montgomery	WAIQ [26]	32-22-55	86-17-33
CT	5^	0.98	614	Hartford	WTIC [61]	41-42-19	72-49-51
CT	35^	87.1	457	New Britain	WVIT [30]	41-42-02	72-49-57
KY	7^	15	192	Beattyville	WLJC [65]	37-36-23	83-41-16
NV	40^	32.4	357	Paradise	KBLR [39]	36-00-36	115-00-20
OH	31^	800	278	Cincinnati	WKRC [12]	39-06-59	84-30-07
OR	27^	712	508	Portland	KOPB [10]	45-31-21	122-44-46
QU	3/12	0.05		Cabano	CIMT[9]/ CFTF [29]		
QU	6/11	0.05		Riviere-du-Loup	CIMT[9]/ CFTF [29]		

New-station permits expired, dismissed, etc.:

St	City	Ch	# permits	St	City	Ch	# permits
TX	Harlingen	66	3				

Applications to change existing stations

St	Ch	ERP	HAAT	City	Call	Latitude	Longitude
CO	5-	100	428	Grand Junction	KREX-TV	39-03-58	108-44-46
FL	63z	642	159	Boca Raton	WPPB-TV		
FL	49z	3467		Tice	WRXY-TV		
IN	6z		279	Indianapolis	WRTV		
LA	10z		427	Lafayette	KLFY-TV	30-19-19	92-16-59
MA	20^	700	390	Boston	WCVB-DT		
TX	34+	1230	299	Waco	KCTF#	31-19-17	97-20-40

Entries in *italics* are corrections to the tower coordinates only - nothing has actually changed.

Applications to change construction permits

St	Ch	ERP	HAAT	City	Call	Latitude	Longitude
CA	25^	302	208	San Diego	KGTV-DT		
MD	59^	603		Baltimore	WBAL-DT		
MO	29-		358	Kansas City	KCWE	39-05-01	94-30-57

Changes granted to existing stations

St	Ch	ERP	HAAT	City	Call	Latitude	Longitude
AB	2z	46.6		Lethbridge	CKAL-1		
AB	4	3.48		Red Deer	CKEM-1		
IA	36+	300	102	Davenport	KQCT	41-28-29	90-26-45
IL	23-	1620	320	Decatur	WPXU		
IL	46z		406	East St. Louis	WHSI		
PR	68z	457		Humacao	WVSN		
TX	68z		538	Arlington	KPXD	32-35-24	96-58-25
VA	35+	5000		Richmond	WRLH-TV		
WI	25z	2000	299	La Crosse	WLAX		

The new KQCT [36] site is in Illinois. CKEM-TV-1 [4] is also moving 22.7km southeast of the original site, and CKAL-TV-1 [2] 10.7km to the south.

Changes granted to construction permits

St	Ch	ERP	HAAT	City	Call	Latitude	Longitude
MT	10+	217	711	Helena	KMTF	46-49-35	111-42-33
NC	35z	515	199	Jacksonville	WPXZ-TV	34-31-10	77-26-52
SC	63-	17.4	136	Sumter	WQHB	33-51-56	80-17-08

Changes expired, dismissed, etc.

St	City	Ch	Call	St	City	Ch	Call
AK	Anchorage	4	KTBY	MT	Helena	12	KTVH
CA	Fresno	47	KJEO	PR	Aguadilla	32	WELU
IA	Ottumwa	62	K62ES	VA	Roanoke	38	WPXR
ME	Bangor	7	WVIT-TV				

LPTV Displacement applications

St	City	Call	Fm	To	St	City	Call	Fm	To
AL	Dothan	WJNN-LP	69	5z	OH	Youngstown	W62BT	62	42z
AZ	E Flagstaff	K68BW	68	39	OR	Albany	K20DD	20	38
AZ	Flagstaff	K68BW	68	54	OR	Salem	K27ER	27	41+
CA	Temecula	KEZT-LP	67	36	SC	Myrtle Bch.	W66BJ	66	34
CA	Sacramento	KBTB-LP	25	9	TN	Cleveland	W64CH	64	25
CO	Romeo	K61AZ	61	49	UT	Garfield Co	K25OC/ K27CE/ K65AL	25/ 27/ 65	24/ 26/ 22
FL	Jacksonvl.	WUBF-LP	69	23	UT	Orangeville	K60BU/ K62BL	60/ 62	17/ 19
FL	Tampa	WSVT-LP	14	18	UT	Price	K68AX	68	47
FL	Tampa	WTAM-LP	6	30	UT	Salt Lake C	K38CN	38	69
ID	Albion	K09IR	9	32	UT	Sevier Co.	K29CU	29	41
ME	Bangor	W17BF	17	36	UT	Spring Glen	K66AA	66	45
NM	Tohatchi	K18CX	18	41	WA	Longview	K68DZ	68	34+
OH	Delaware	WXCB-LP	56	42z	WA	Vancouver	K14HN	14	35

I don't know why K68BW appears under two different cities and with two different new channels!

LPTV Displacements granted

St	City	Call	Fm	To	St	City	Call	Fm	To
AL	Alexander C	WAXC-LP	64	25	NC	Wilson	W20BV	38	20
AL	Athens	WTZT-LP	28	11	NE	Norfolk	K35FM	30	35
AR	Hope	KTSS-LP	55	50	NE	O'Neill	K43FX	34	43z
AR	Winslow	K09XE	63	92	NJ	New Brunswick	W54CX	36	54z
AZ	Many Farms	K34FF	63	34	NM	Carrizozo	K20FW	51	20
CA	Bakersfield	KJ0I-LP	33	69	NM	Chama	K34PD	69	34z
CA	Blythe	K24FA	61	24+	NM	Gallina	K30PT	63	30+
CO	Denver	K27FU	38	27	NM	Portales	K58FW	64	58+
CO	Durango	K25GE	66	25	NM	Thoreau	K36FD	61	36
CO	Ignacio	K52GA	15	52	NV	Hawthorne	K30FS/ K48GG	30/ 48	63/ 69
CO	Lake George	K58FY	62	58n	NV	Mina	K39EZ	67	39
DE	Dover	W08DO	27	8	NV	Schurz	K36FF	64	36
FL	Gainesville	WJXE-LP	14	43	OH	Cincinnati	W39CG	35	39+
FL	Naples	W56DW	54	56+	OR	Hood River	K36FG	68	36
IA	Davenport	K61HD	58	61	OR	Pacific City	K19EI	68	19
IA	Marshalltn.	KDAO-LP	39	45	SD	Sioux Falls	KCPO-LP	7	26z
IA	Storm Lake	K47FZ	40	47z	TX	Cisco	K58FZ	48	58+
IL	Danville	W31BX	68	31	TX	Lubbock	KGLR-LP	40	55
IL	Rockford	W25CL	62	25	TX	Victoria	K21FG	27	21z
LA	Alexandria	K64FT	19	64z	WA	Walla Walla	K46PL	17	46
LA	Monroe	K59GI	27	59+	WA	Wenatchee	K24EX	30	24
ME	Dover	W27CE	19	27	WV	Parkersburg	W45BW	39	45
MO	C Girardeau	K53FZ	45	53+	WY	Bondurant	K41EX	69	41
MT	Billings	K36EZ	20	36	WY	Rawlins	K22FM	21	22
NC	Boone	W65DT	27	65z					

LPTV Displacements Dismissed/Denied

St	City	Call	Fm	To	St	City	Call	Fm	To
CA	Bakersfield	K65EY	65	21	OH	Delaware	WXCB-LP	56	45

Technical changes on the air

St	Ch	Call	City	What happened
AZ	55+	K55EH	Phoenix	decrease power 13.5->6.2KW, drop directional antenna.
FL	31-	W31AU	Orlando	increase power 9.9->30KW, move a few meters west.
MS	7z	W07BN	Bruce	increase power 270->327 watts, decrease tower height 186->19.5m
NM	53z	KTEL-LP	Albuquerque	move from ch. 15.
NV	27n	K27AF	Las Vegas	increase power 35.6->43KW.
OH	25z	WOHL-LP	Lima	move from ch. 67; decrease power 19.5->16.5KW; move about 14km south-southwest.
TX	43-	KHLM-LP	Houston	move from ch. 4; move about 20km north-northeast; increase power 67w->65.1KW; increase tower height by 114m.
WA	62n	K62FS	Port Townsend	move from ch. 41. (x-K41CU)
WA	22z	KSKN	Spokane	increase power 214->1860KW.

New stations on the air or requesting operating license

St	Ch	ERP	HAAT	Call	City	Latitude	Longitude
AL	28-	16.3		W28BR	Birmingham	33-29-04	86-48-25
AR	14-	15.5		K14JV	Little Rock	34-49-52	92-19-18
AZ	41+	25		K41EN	Phoenix	33-20-00	112-03-45
CA	55+	20		K55HR	Chico	39-57-34	121-42-40
CA	40-	10		KDFX-LP	Indio	33-39-19	115-59-05
CA	50+	5.2		K50FB	Palm Springs	33-52-03	116-25-59
CA	21-	12.4		K21EX	Paso Robles	35-38-45	120-44-16
CA	24*	561	437	KGO-DT	San Francisco	37-45-19	122-27-06
CA	29*	1000	401	KPIX-DT	San Francisco	37-45-20	122-27-05
CA	49-	5.62		K49EK	Santa Barbara	34-27-57	119-40-38
CO	33+	1.12		K33EW	Woodland Park	38-59-13	105-04-08
DC	27*	75	177	WETA-DT#	Washington	38-53-30	77-07-55
DC	34*	646	254	WUSA-DT	Washington	38-57-01	77-04-47
DC	39*	646	254	WJLA-DT	Washington	38-57-01	77-04-47
FL	56+	11.8		W56DV	Tallahassee	30-29-36	84-17-01
IN	9*	15.8	284	WISH-DT	Indianapolis	39-53-25	86-12-20
NC	25+	11.9		W25BU	Asheville	35-31-39	82-29-44
OH	12*	0.8	161	WMFD-DT	Mansfield	40-45-50	82-37-04
PA	60z	10.8		W60BL	Butler	40-53-51	79-53-22
PA	56+	38.1		W56CG	Greensburg	40-18-14	79-35-48
PA	64-	42.4		W64BL	Kittanning	40-47-19	79-32-05
PA	29+	5.92		W29AV	Washington	40-26-46	79-57-51

SC	44n	20.3		W44AX	Charleston	32-49-04	79-50-08
SD	46z	3980	589	KDLT-TV	Sioux Falls	43-30-17	96-33-22
TX	20+	9		K20FK	Brownsville	25-57-49	97-31-11
TX	28-	0.125		K28FL	McAllen	26-15-23	98-13-49
TX	68z	60		K68EI	San Antonio	29-31-25	98-43-25

Stations deleted/dismissed/off air/etc.

St	Call	St	Call	St	Call	St	Call	St	Call
AR	K21FC	CO	K31EK	ID	K40EZ	MT	K40FA	TX	K02PI
AR	K29DG	CO	K31EP	ID	K43FF	MT	K44EX	TX	K03HH
AR	K43FG	ID	K18FG	ID	K45EW	ND	K17DQ	TX	K07WT
CA	K42EJ	ID	K28FC	LA	K22FG	ND	K31EQ	TX	K12PA
CA	K46DQ	ID	K30FE	MT	K15EW	NY	W27BJ	TX	K12PB
CO	K27CP								

Call changes

Was:	Now:	City:	Ch	Was:	Now:	City:	Ch
KEZT-LP	KDIG-LP	Encinitas, CA	67	W62CE	WDWT-LP	Orlando, FL	62
K30BI	KBIT-LP	S.F., CA	30	KNLD	KQDS-TV	Duluth, MN	21
WBPT	WSAH	Bridgeport, CT	43	K43CT	KELM-LP	Reno, NV	43
W48CI	WFUN-LP	Miami, FL	48	W25AK	WONS-LP	Olean, NY	25

Programming changes

Call	Location	Programming
K41EN	Phoenix, AZ	new, AIN.
K67FE	Phoenix, AZ	from KBPX [13] to KPPX [51].
K26FO	Daggett, CA	sold to TBN.
WBPT [43]	Bridgeport, CT	sold to Shop-At-Home. (Previous sale to Spanish home-shopping group fell through)
W42AO	Athens, GA	relaying WATC [57], religious.
W18AT/ W24AW/ W54BK	Gary/ Valparaiso/ Chesterton, IN	sold to WHME [46], religious.
K05KD	Carthage, MO	sold to religious organization.
K17EM	Roswell, NM	sold to KWBQ [19], WB.
K03CQ/K05DF	Mapleton, OR	sold to KMTR [16], NBC.
XHRIO [2]	Matamoros, TM	to be UPN?
WBJE [15]	Christiansted, VI	sold to Pax.
KNDU [23]/ KNDU [25]	Yakima/ Richland, WA	sold to KHQ [6] Spokane. Maybe to become satellites of KHQ? All three stations are already NBC.



Forum & Other Stuff

Thanks to Jim Ayers, Dave Nieman, Chip Kelley, and Fernando Garcia for information appearing elsewhere in this column.

K33DT Boise, Idaho has applied for experimental permission to operate as a DTV station. KTZZ-TV [22] Seattle has been sold to "KTWB, L.L.C.". The station is a WB affiliate, and the KTWB-TV calls are not in use anywhere else. I suspect there may be a call change in the near future... Also in the Northwest, the two Mapleton, Oregon translators had been relaying Eugene CBS and ABC affiliates KVAL and KEZI - they have now been bought by Eugene's NBC affiliate!



Rick Lewis in Phoenix reports K41EN on the air. He also reports stations on channels 57 and 69 in parallel. I can't figure out who they are. (There is an application for K49DF to move to channel 57, but it's not commonly-owned with channel 41 and in any case, to my knowledge the move hasn't been granted yet) I don't list anything near Phoenix on channel 69.

Fernando says K35ES McAllen, Texas has an extremely strong signal in Monterrey - stronger than KNVO [48] in the same city, which has over 200 times the power! I can't fully explain this. K35ES's transmitter is about 25km northwest of KNVO's, but KNVO's antenna is about 170' higher. (Not to mention the power difference..) Both stations have directional antennas that don't favor Mexico; even after factoring in the directional antennas, KNVO should have 70 times the power. My guess is there's something wrong with KNVO's transmitter and they're not using the power they're licensed for. Fernando also believes K20FK Brownsville (which simulcasts K35ES) is off. (I do note K20FK has applied to move to channel 21)

Keith Smith's NTSC VCR won't display DTV signals, but it does acknowledge their presence.. DTV stations WXYZ [41] and WJBK [58] are on the air in the Detroit area. Keith's VCR displays the words "No Signal" and goes blank on open channels. But on channels 41 and 58, Keith gets the DTV "snow" pattern. Apparently this model of VCR (it's a recent Sanyo) determines channel occupancy by checking the RF signal strength, rather than checking for synchronization signals.

He's also intermittently seeing these snow patterns on channel 59 (either WVPX-DT Akron is on the air, though I only list it as an application, or he's seeing a very weak signal from analog CICO-TV-59 Chatham, Ontario) and channel 45. (WDIV-DT Detroit testing; WXIN-DT Indianapolis; or weak tropo from analog CBLN-TV-4 Wingham.) Keith said he saw Bud Paxson on C-Span indicating some hesitance about getting into DTV. But his stations in Provo, Utah (KUPX-DT 29); Bellevue, Washington (KWXP-DT 32); Norfolk, Virginia (WPXV-DT 46); and Akron, Ohio (WVPX-DT 59) have filed their DTV applications.

An excellent reference program for the TV DXer is <http://www.csvhfs.org/csvhftp.html>. TVFMSTNS allows you to browse the FCC FM & TV databases, calculate the distance from stations to your location, and even plot the directional patterns of stations. It's inexpensive shareware, a DOS program that will also run under Windows. (I've tried both Win 3.11 and Win98, and am sure it'll work under Win95 too)

Work is proceeding on the TV Station Guide. Maps have been drawn for all channels, though I'm still trying to get border maps for Canada and Mexico to overlay the U.S. map. (I have the Canadian and Mexican maps, just can't get them to overlay yet..) I'm hoping to have the master copy ready by May.

Here's hoping we're off to a great Es season!

73 Doug



Canadian DTV Channel Plan

ON	Mattawa	CBFT-27	26	30	ON	Wawa	CBFT-23	16	51
ON	Maynooth	CBOT-4	51	48	ON	Wawa	CHBX-1	7	45
ON	McArthur's Mills	CBOT-5	33	22	ON	Wawa	CBAT-3	9	55
ON	McArthur's Mills	CICO-93	42	46	ON	Wheatley	CHWI	16	66
ON	Midland	CIII-7	7	27	ON	White River	CBAT-2	12	34
ON	Nipigon	CBLK	16	14	ON	Warton	CKCO-2	2	35
ON	Nipigon	CBFT-19	26	24	ON	Warton	CBLN-5	20	17
ON	Normandale	CBLN-6	44	60	ON	Windsor	CICO-32	32	68
ON	North Bay	CKNY	10	38	ON	Windsor	CBEFT	54	69
ON	North Bay	CFGC-2	2	64	ON	Windsor	CHWI-60	60	65
ON	North Bay	CHCH-6	32	22	ON	Windsor	CBET	9	35
ON	North Bay	CHNB	4	66	ON	Wingham	CBLN-4	45	54
ON	North Bay	CICA-6	6	69	ON	Wingham	CKNX	8	62
ON	Orillia	CFTO-21	21	15	ON	Woodstock	CITY-2	31	51
PE	Charlottetown	CBCT	13	66	PE	Elmira	CBCT-2	11	19
PE	Charlottetown	CBAFT-5	31	32	PE	St. Edward	CBCT-1	4	26
PE	Charlottetown	CIHF-14	42	43	PE	St. Edward	CKCW-2	5	33
PE	Charlottetown	CKCW-1	8	10	PE	St. Edward	CBAFT-6	9	35
QU	Aguanish	CBST-7	8	12	QU	Montreal	CKMI-1	46	51
QU	Alma	CBJET-1	32	30	QU	Montreal	CBMT	6	61
QU	Baie-Comeau	CBMIT	28	21	QU	Montreal	CJNT	62	69
QU	Baie-Comeau	CBST-19	7	33	QU	Murdochville	CBGAT-2	10	39
QU	Baie-Trinite	CIVF	12	49	QU	New-Carlisle	CBVN	45	38
QU	Bearn/Fabre	CKRN-3	3	60	QU	New-Richmond	CBVR	27	21
QU	Beauceville	CBVT-6	6	10	QU	Perce	CBGAT-20	11	48
QU	Blanc-Sablon	CBST-17	3	16	QU	Perce	CHAU-5	13	53
QU	Blanc-Sablon	CBMST	5	39	QU	Perce	CBVP	14	44
QU	Camp LG-2	CH2440	6	7	QU	Perce	CIVK-2	40	41
QU	Carleton	CIVK	15	36	QU	Port-Daniel	CBVF	16	51
QU	Carleton	CBGAT-14	2	58	QU	Port-Daniel	CBGAT-21	7	19
QU	Carleton	CHAU	5	65	QU	Quebec	CBVT	11	12
QU	Chandler	CBVB	23	22	QU	Quebec	CIVQ	15	25
QU	Chandler	CHAU-4	6	26	QU	Quebec	CFAP	2	61
QU	Chandler	CBGAT-15	8	57	QU	Quebec	CKMI	20	39
QU	Chapeau	CBOT-1	11	52	QU	Quebec	CFCM	4	49
QU	Chapeau	CIVP	23	34	QU	Quebec	CBVE	5	67
QU	Chibougamau	CBMCT	4	8	QU	Radisson	CFBJ	10	12
QU	Chibougamau	CBFAT	5	15	QU	Radisson	CJBJ	13	11
QU	Chicoutimi	CBJET	58	21	QU	Radisson	CBFRT	8	14
QU	Chicoutimi	CJPM	6	46	QU	Rapides-des-Joachims	CBOFT-2	8	31

QU	Chicoutimi	CIVV	8	16	QU	Rimouski	CFER	11	47
QU	Cloridorme	CHAU-8	11	16	QU	Rimouski	CJPC	18	27
QU	Cloridorme	CBGAT-16	8	28	QU	Rimouski	CJBR	2	45
QU	Escuminac	CBVA	18	28	QU	Rimouski	CIVB	22	40
QU	Fermont	CBFT-13	7	8	QU	Riviere-au-Renard	CBGAT-22	2	25
QU	Fermont	CBMRT	9	19	QU	Riviere-au-Renard	CHAU-7	4	46
QU	Gascons	CIVK-1	32	29	QU	Riviere-au-Tonnerre	CBST-6	7	15
QU	Gaspe	CBVG	18	30	QU	Riviere-du-Loup	CFTF	29	41
QU	Gaspe	CIVK-3	35	34	QU	Riviere-du-Loup	CKRT	7	53
QU	Gaspe	CHAU-6	7	56	QU	Riviere-du-Loup	CIMT	9	56
QU	Gaspe	CBGAT-17	9	33	QU	Riviere-St.-Paul	CBMPT	11	23
QU	Gaspe Nord	CFER-2	5	20	QU	Riviere-St.-Paul	CBST-16	21	20
QU	Grand-Fonds	CIVB-1	31	51	QU	Roberval	CJPM-1	10	14
QU	Grande-Vallee	CBGAT-3	6	23	QU	Rouyn	CFVS-1	20	41
QU	Harrington-Harbour	CBMUT	13	7	QU	Rouyn	CFEM	13	67
QU	Harrington-Harbour	CBST-11	8	12	QU	Rouyn	CKRN	4	9
QU	Havre-St.-Pierre	CBST-1	12	21	QU	Rouyn	CIVA-1	8	23
QU	Hull	CIVO	30	64	QU	Schefferville	CBSET-1	7	8
QU	Hull	CHOT	40	15	QU	Schefferville	CBFT-8	9	10
QU	Hull	CFGS	49	63	QU	Sept-Iles	CBST	13	35
QU	Ile du Havre Aubert	CBMT-1	16	17	QU	Sept-Iles	CBSET	3	14
QU	Iles-de-la-Madeline	CBMT	12	45	QU	Sept-Iles	CIVG	9	18
QU	Iles-de-la-Madeline	CBMYT	7	49	QU	Sherbrooke	CKMI-2	11	41
QU	Jonquiere	CKRS	12	48	QU	Sherbrooke	CIVS	24	68
QU	Jonquiere	CFRS	4	38	QU	Sherbrooke	CBMT-3	50	52
QU	Joutel	CJDG-3	11	46	QU	Sherbrooke	CHLT	7	60
QU	L'Anse a Valleeau	CHAU-9	12	42	QU	Sherbrooke	CKSH	9	63
QU	La Tabatiere	CBMLT	10	41	QU	Sherbrooke	CFKS	30	66

More to follow next month.

Doug Smith (W9WI)
1385 Old Clarksville Pike
Pleasant View, TN 37146-8098
w9wi@bellsouth.net



FM NEWS

MAY 1999

EDITOR: GREG CONIGLIO
90 SLATE CREEK DRIVE APT. #3
CHEEKTOWAGA, NEW YORK 14227
E-MAIL: coniglio@localnet.com
WEB: http://www.geocities.com/~wgrc

Most of the information appearing in this column is courtesy of:
M STREET JOURNAL - 54 MUSIC SQUARE EAST SUITE 201 - NASHVILLE, TENN. 37203
PHONE: (609) 883-3321, FAX: (609) 883-5696, E-MAIL: MstreetTom@aol.com

KEY TO ABBREVIATIONS:
&: satellite programming
AF: New frequency allocation
accepted for filing for a new FM license
AFA: American Family Association
CC: call letter change
CL: city of license change
CX: a construction permit has been canceled
C1,C2,etc: a change in status to that FM license class
DA: directional antenna
DE: station has been deleted
FC: format change
GA: granted amendment to the table of FM allocations
GE: granted extension of construction permit

GX: granted replacement of expired permit
LC: license to cover filed (means station is ready to come on air)
MC: multiple-city legal ID
NC: no change yet on a reported change/permit
ND: non-directional antenna
NO: not on the air
NS: new station granted
NW: new station signs on
OSA: one-step application granted for change
PA: proposed amendment to change FM table of allocation
PC: power change on the air (">" for increase, "<" for decrease, when known)

PG: power change granted (">" for increase, "<" for decrease, when known)
QC: frequency change occurred
QG: frequency change granted
RA: silent station returns to air
RE: station requests extension on permit
RX: station requests replacement of expired permit
SG: slogan change or update
SI: station is silent
XA: dismissed amendment to FM allocations
XC: transmitter site change occurred
XG: transmitter site change granted



UNITED STATES

ALABAMA:

Cedartown: WJCK 88.3 PC 2.7 kW (v), 100 ft, DA, class C3, XC: 33-50-17 / 85-43-57, CL: Piedmont, Ala.
Georgiana: WFX 107.7 CC (ex WWGA), NW, adult contemp.
Montgomery: WLBF 89.1 XG: 32-24-13 / 86-11-49
Oneonta: WKLD 97.7 inc. to 341 ft.

ALASKA:

Fairbanks: K203CT 88.5 NS-10w: KLOV-FM

ARIZONA:

Arizona City: KBZR 106.5 FC to classic hits // KESP
Glendale: KLNZ 103.5 CC (ex KWCV) "La Nueva Zeta" (Phoenix)
Holbrook: KBMH 90.3 CC (NS)
Oracle: KIXD 106.3 FC to rhythmic oldies "Mega" (Tucson)
Paradise Valley: KHOT 105.9 FC to reg. Mexican
Payson: KBZG 104.3 FC to rhythmic oldies
Payson: K220GZ 91.9 NS-23w: KAWZ-ID
Show Low: KRFM 96.5 adds ABC AC "Mix" (&)
Tucson: KZPT 104.1 FC to hot AC "The Point"

ARKANSAS:

Ashdown: KARQ 92.1 QG to 93.3 - C3, PG > 7.4 kW, 597 ft, XG: 33-30-24 / 94-12-25
Blytheville: KBCM 88.1 CC (NS)
Blytheville: *NS 88.1 225w, 190 ft, (AFA)
El Dorado: KAUG 91.9 NW, AFA cont. Christian
England: KLEC 96.5 CC (ex KHUG) "Lick 96.5"
Heber Sps: KAWW 100.7 FC to standards // KDRE
Heber Sps: KBMJ 89.7 CC (NS)
Magnolia: KVMA 107.9 noted off the air
Malvern: KMKV 106.7 GA: to Bryant, AR
Marked Tree: KJBR 93.7 FC to classic country
Marshall: KBCN 104.3 SG "Huggin' Country"
N. Little Rock: KDRE 101.1 FC to adult standards
Texarkana: KTVN 107.1 FC to CHR (now only simulcasting KHTE 106.3 in the morning)
Wilson: KAPW 103.7 XG: 35-18-04 / 90-19-34, CL: Turrell, AR

CALIFORNIA:

Alturas: KCNO 94.5 FC to CD Country (&)
Barstow: KXXZ 95.9 PG > 7.9 kW, 512 ft, XG: 34-51-20 / 117-20-57
Burney: K203CU 88.5 NS-250w(v): KAWZ-ID
Carmel: KBTU 101.7 CC (ex KXDC), FC to dance-CHR (Monterey)
Ford City: KZPE 102.1 dec. to 128 ft.
Glendale: KSCA 101.9 PG < 1750w, 3090 ft, XG: 34-13-36 / 118-03-56
Kingsburg: KLVK 106.3 PC > 16 kW, 420 ft, DA, B1, XC: 36-26-50 / 119-32-10
Lompoc: KAKV 106.7 NW, talk & Sports

FM NEWS PAGE 2

California:

Lompoc: KAOH 104.9 OSA to 105.1, 550 w, 1069'
Long Beach: KBUE 105.5 PC > 3 kW, 466 ft.



Manteca: KKME 96.7 CC (ex KFRY)
Orcutt: KPAT 95.7 CC (ex KGDP)
Paso Robles: KDDB 92.5 FC to WW1 AC "Star 92.5" (&) (San Luis Obispo)
Ronher Park: KJZY 93.7 NS-1200w: KJZY
San Joaquin: KVP 105.5 PSA to B1, 25 kW, 328'
San Luis Obispo: KWQH 97.1 FC to religion // KGDP
San Luis Obispo: KLV 88.5 CC (ex KPAT), NW, K-Love contemporary Christian
Santa Margarita: KKAL 106.1 CC (ex KWEZ)
Santa Maria: KXFM 99.1 adds Bob & Tom
Turlock: KCSS 91.9 PC > 400w(v), 105 ft.

COLORADO:

Colorado Sps: KSPZ 92.9 PC > 79 kW, 2198 ft, XC: 38-44-44 / 104-51-39
Crested Butte: KBUT 90.3 inc. to -633 ft.
Grand Jct: KSNJ 100.7 PG 42 kW, 1378 ft., NW, CC (ex KBFE), adult standards (&)
Grand Jct: KAFM 88.1 NW, jazz/folk/blues
Montrose: KVM 89.1 CC (ex KAZD), NW, info & alternative // KVNF
Ouray: KWGL 105.7 FC to ABC a/c (&)
Pueblo: KVVU 99.9 PC > 79 kW, 2198 ft., XC: 38-44-44 / 104-51-42
Silverton: *NS 103.7 5 kW, 1460 ft.
Winsdor: KUAD 99.1 inc. to 695 ft.
Wray: KATR 98.3 PC > 100 kW, 554 ft, class C1, CL: Otis, CO, XC: 40-25-13 / 102-58-10
Yuma: KNEC 100.9 NW, standards (&)

CONNECTICUT:

Hampden: WKCI 101.3 XC: 41-25-22 / 72-57-06

DELAWARE:

Wilmington: XLTR? 103.5 WXHL 89.1 noted here

DISTRICT OF COLUMBIA:

Washington: WGAY 99.5 FC, relaying Jammin' Oldies 105 from NYC (will probably change to that same format soon)

FLORIDA:

Beverly Hills: WGUL 106.3 XG: 28-26-40 / 82-28-04
Bradenton: WTBT 103.5 FC to classic rock, CC (ex WDUV (Tampa))
Cambon: W217AZ 91.3 NS-6w: KEFX-ID
Carabelle: WOCY 106.5 NW, country
Cedar Creek: WKSG 89.5 NW, contemp. Christian (Morningstar) (Ocala)
Cedar Key: *** 96.7 PA: add class A
Coral Cove: WSRZ 107.9 CC (ex WYNF), FC to oldies (Sarasota)
DeLand: WOCL 105.9 FC to rhy. Oldies (Orlando)
Englewood: WYNF 105.9 NW, rock (Sarasota)
Gainesville: W216BK 91.1 NS-13w(v): WPCS-FL

Florida:

Gifford: W214BD 90.7 NS-50w: WJFP 90.1
Gulf Hammock: *** 99.3 PA: add class A
Jupiter: WJBW 99.5 QG to 106.3 - C3, PC > 25 kW, DA, XG: 26-56-20 / 80-07-02
Key Largo: WZMQ 106.3 CC (ex WXTF)
La Crosse: WRKG 99.5 PC 2.2 kW, 472 ft., CC (ex WQVR)
Miami: WDNA 88.9 PC > 7.4 kW, 1145 ft, DA, C2, XC: 25-32-24 / 80-28-07
Naples: WTLT 93.5 FC to soft AC "Lite 93.5", CC (ex WPRW)
Naples: WARO 94.5 adds Bob & Tom
New Pt. Richey: WDUV 105.5 CC (ex WTBT), FC to easy & standards (Tampa)
Niceville: WNCV 100.3 PC > 3.5 kW, 440 ft.
Okeechobee: WWFR 91.7 PG > 2650w, 499 ft, DA, XG: 27-07-14 / 80-23-59, CL: Stuart, FL
Pensacola: WIRP 88.3 LC
San Carlos Park: WDRR 98.5, PC > 20.5 kW, C3, DA
Sarasota: WCTQ 106.5 CC (ex WSRZ), FC to country
Venice: WDUV 92.1 CC (ex WCTQ), FC to adult standards "Dove" (Sarasota)

GEORGIA:

Albany: WNUQ 101.7 CC (ex WKAK), FC to dance - CHR "Q 101.7"
Americus: WB 89.3 11 kW (v), 479 ft. (AFA), CC (NS)
Darien: WYNR 107.7 inc. to 482 ft.
Folkston: *NS 89.3 16 kW, 308 ft, DA
Fort Valley: WIBB 97.9 adds Doug Banks
Gray: WRNC 96.5 CC (ex WIBD), FC to Real Country (&) (Macon)
Greensboro: WDDK 103.9 PC > 5.3 kW
Helen: *NS 89.9 15w, 561 ft.
Irwin: WVX 103.7 PC > 6 kW
Jasper: WNEE 88.3 CC (ex WBCS)
Jesup: *NS 90.5 6 kW, 102 ft.
Macon: WMKS 92.3 CC (ex WPPG) WPPG calls were never used; returns to old calls
Ringgold: WSGC 101.9 FC to WW1 oldies (&)
Savannah: WSCA 94.1 CC (ex WCHY)
Talking Rock: WNSY 100.1 PC 15 kW, 423 ft, C3, XC: 29-41-17 / 97-40-39
Washington: WXKT 100.1 FC to soft AC (&) "Love"



HAWAII:

Kekaha: KSHK 103.3 CC (ex KAU1)
Kihei: K210CM 89.9 NS-10w(v): WEFX-ID
Kihei: K220HA 91.9 NS-10w(v): KAWZ-ID

IDAHO:

Homedale: *NS 106.3 100 kW, 1968 ft.

KABF 88.3 FM Community Radio for Arkansas

ILLINOIS:

Carthage: WNNK 92.1 XC: 40-35-37 / 91-06-48
 Colchester: WMQZ 104.1 LC
 Columbia: KMJM 104.9 FC to urban AC // KATZ-FM
 E. Saint Louis: WCBW 89.7 250w, 187 ft, DA CC (NS)
 Galena: WDBQ 107.5 SG "Oldies 107.5"
 Hillsboro: WXAJ 99.7 XG: 39-21-12 / 89-31-53
 Kankakee: WVLI 95.1 PC< 2.3 kW, 367 ft.
 Peoria: WBGE 92.3 adds Tom Joyner
 Ramsey: WJLY 88.3 LC
 St. Joseph: WGNJ 89.3 PC> 6 kW, 351 ft, B1, XC: 40-05-16 / 87-53-42
 Spring Valley: WAIV 103.3 PG> 4.9 kW, 361 ft, XG: 41-18-09 / 89-14-11

INDIANA:

Auburn: WCKZ 102.3 CC (ex WGL) "Z 102.3"
 Brownsburg: WKLU 101.9 CC (ex WQFE), FC to JRN classic rock (&) (Indy)
 Ellettsville: WGCT 105.1 PG< 1750w, 620ft.
 Ft. Wayne: W204BF 88.7 NS-10w: WBKE 89.5
 Lowell: WZVN 107.1 inc. to 502 ft, XG: 41-21-10 / 87-24-11
 Madison: WORX 96.7 PC< 1050w, 551 ft, XC: 38-44-32 / 85-21-43
 Princeton: WRAY 98.1 adds Nashville Nights (&)

IOWA:

Asbury: KJOD 103.3 SG "New Country 103"
 Brooklyn: KSKB 99.1 PC< 43 kW, 525 ft, XC: 41-41-22 / 92-21-33
 Dubuque: KXGE 102.3 PG> 2 kW, 308 ft, XG: 42-35-07 / 90-38-50 "Eagle 102"
 Dubuque: New address for 1490, 105.3, 102.3, 103.3, 107.5: 5490 Saratoga Rd., Dubuque, IA 52004
 Ida Grove: KIDA 92.9 PG> 25 kW, 328 ft, XG: 42-29-23 / 95-17-40
 Maquoketa: KMAQ 95.1 QC from 95.3, PC> 6 kW
 Sageville: KIYX 106.1 NW, AC "Kicks 106" (&)

**KANSAS:**

Arkansas City: KYQQ 106.5 adds Nashville Nights (&) (Wichita)
 Emporia: KPOR 90.7 3 kW, 328 ft, CC (NS)
 Enterprise: *NS 90.5 250w, 171 ft.

KENTUCKY:

Beaver Dam: WKLX 100.7 PC> 7 kW, 620 ft.
 Hartford: WXMZ 106.3 CC (ex WKHB)
 Mt. Sterling: WMST 105.5 OSA to C3, 25 kW, 328 ft, DA, XC: 38-04-09 / 84-18-44
 Prestonsburg: WXXZ 105.5 OSA to 105.3, 4.7 kW, 371 ft.

LOUISIANA:

Abbeville: KPEL 105.1 CC (ex KROF)
 Basile: KQIS 102.1 PC> 100 kW, 981 ft, class C1, XC: 30-05-13 / 92-22-54
 Homer: KYLA 106.7 SG "Real Country LA106.7"

Louisiana:

Lacombe: WYLA 94.7 PG< 3 kW, 472 ft, DA, XG: 30-18-42 / 89-54-54
 Monroe: *NS 88.7 25 kW, 167 ft.

MAINE:

Farmington: WKTJ 99.3 FC to hot AC
 Sanford: WCDQ 92.1 FC to modern rock
 Winter Hbr: WAKN 97.7 LC
 York Ctr: WUBB 95.3 adds Nashville Nights

MARYLAND:

Cambridge: WCEM 106.3 FC to hot AC

MASSACHUSETTS:

Fairhaven: WFHN 107.1 PC> 6 kW, 325 ft, DA, XC: 41-37-43 / 71-00-24
 Lawrence: WEGQ 93.7 FC to rhy. Oldies "Star"
 Marshfield: WATD 95.9 PC< 1450w, 469 ft.
 Mashpee: WVKJ 101.1 PG> 6 kW, 272 ft, XG: 41-36-13 / 70-29-21
 Northampton: WEIB 106.3 NW, variety
 Northampton: WHMP 99.3 PC< 5.8 kW, 318 ft, XC: 42-22-25 / 72-40-26
 W. Tisbury: *** 104.3 GA: add class A

MICHIGAN:

Birmingham: WCSX 94.7 PC< 14 kW, 738 ft.
 Detroit: WDRQ 93.1 FC to CHR
 Detroit: WXDG 105.1 FC to R&B oldies
 Gladstone: WGKL 105.5 NW, oldies "Cool 105"
 Piconning: WYLZ 100.9 CC (ex WMJK), adds Bob & Tom
 Saginaw: WILZ 104.5 CC (ex WMJA), adds Bob & Tom
 Saginaw: WTLZ 107.1 FC to urban AC "Hot 107"

MINNESOTA:

Babbitt: KAOD 106.7 PG> 33 kW, 430 ft.
 Minneapolis: KTIS 98.5 dec. to 1033 ft.
 Rochester: KRCH 101.7 adds Bob & Tom

MISSISSIPPI:

DeKalb: WJXM 105.7 NW, urban "105.7 Jamz"
 Gluckstadt: WYOY 101.7 adds Steve & DC (Jackson)
 Jackson: WKTF 95.5 FC to CHR "The Beat"
 Laurel: WMXI 98.1 FC to JRN soft AC "Mix" (&)
 Lucedale: WRBE 106.9 FC to JRN country and gospel (&)
 Meridian: WMMZ 102.1 FC to hot AC
 Olive Branch: WOTO 95.7 CC (ex WRXQ), FC to oldies (Memphis)
 Oxford: WAVI 91.5 2 kW, 564 ft. (AFA), CC (NS)
 Pearl: WVIV 93.9 PC> 25 kW, 328 ft, class C3, XC: 32-14-06 / 89-53-46
 Raymond: W220CL 91.9 NS-10w(v): KAWZ-ID
 Tunica: WMPS 96.1 FC to Tunica travel info.
 Tupelo: WAQB 91.7 350w, 75 ft (AFA), CC (NS)
 Union: WZKS 104.1 adds Tom Joyner
 Vicksburg: WBBV 101.1 QG to 101.3 - C3, PG> 13 kW, 394 ft, XG: 32-20-42 / 90-52-55
 Vicksburg: WJJK 98.7 SG "98 Mix" (Jackson)



COUNTRY'S BEST
 HOMETOWN RADIO
 FOR VICKSBURG

MISSOURI:

Ashland: KOQL 106.1 PC> 69 kW, 958 ft, C1, XC: 38-45-01 / 92-33-31
 Canton: KRRY 100.9 PG> 28 kW, 656 ft, C2, XG: 39-53-09 / 91-36-38
 Hannibal: *NS 91.7 9.7 kW, 518 ft.
 High Point: KBMF 89.9 7 kW (v), 377 ft, (AFA), CC (NS)



Ironton: KYLS 92.7 PA: to 95.9 - C3
 Malden: KMAL 92.9 PG> 50 kW, 476 ft, class C2, XG: 36-40-31 / 89-46-19
 Mexico: KWWR 95.7 OSA to 1479 ft, DA, XG: 39-15-49 / 92-08-06
 Osceola: KCVJ 92.3 CC (ex KBUG), FC to cont. Christian // KVCO
 Salem: KKID 95.9 PA: to 92.9 - C3

MONTANA:

Billings: KCMT 96.3 LC
 Butte: K220GY 91.9 NS-10w: KLOV-FM
 Deer Lodge: KQRV 96.5 PA: to 96.9 - C1
 Hamilton: KBMG 95.9 PA: to 96.3 - C
 Hamilton: KXDR 98.1 CC (ex KBEB), NW, hot AC (debut in May)
 Helena: KUHM 91.7 XG: 46-46-11 / 112-01-22
 Kalispell: K208DI 89.5 NS-34w(v): KLOV-FM
 Manhattan: *** 105.7 GA: add class A
 Shelby: KZIN 96.3 PA: to 96.7 - C1

NEBRASKA:

Falls City: KLZA 101.3 OSA to C3, 25 kW, 328 ft.
 Kimball: KBFZ 100.1 NW, country // KOLT-FM
 Omaha: KEFM 96.1 adds Delilah, FC to hot AC "Mix 96.1"
 Ralston: *NS 88.1 420w, 1378 ft.
 Wayne: KTCH 104.9 adds ABC oldies (&)

NEVADA:

Lund: KWPS 88.7 CC (NS)
 Mesquite: KBJG 97.5 OSA to class C, 1968 ft.
 Pawling: W206AW 89.1 NS-250w: WFGB-NY
 Round Mtn: K219DS 91.7 NS-230w: KAWZ-ID
 Sun Valley: KHXR 94.5 PG 12 kW, 459 ft, C3, XG: 39-35-02 / 119-47-56
 W. Wendover: KITY 89.7 CC (NS)

NEW HAMPSHIRE:

Durham: WUNH 91.3 PC> 6 kW (v), 250 ft, DA,

NEW JERSEY:

Atlantic City: W230AA 93.9 noted on with WWFM
 Atlantic City: XLTR107.9 noted with WJRZ 100.1??
 Lincroft: WBJB 90.5 PC< 900w, 371', DA, cls. A
 Manahawkin: WJRZ 100.1 dec. to 433 ft., XC: 39-47-54 / 74-12-10
 Woodbine: WJPH 88.9 LC

NEW MEXICO:

Carlsbad: KATK 92.1 adds Nashville Nights
 Clovis: K219DR 105.3 NS-62w: KCZO
 Eunice: KEJL 100.9 CC (ex KYRK), FC to Jones classic rock (&) (Hobbs)
 Portales: K214DH 90.7 NS-99w: KLOV-FM
 Taos: KTAO 101.9 QC from 101.7, PC< 1.2 kW, 2795 ft, XC: 36-14-48 / 105-39-15

**NEW YORK:**

Alfred: WZKZ 101.9 NW, CD Country (&)
 Altamont: WAAP104.9 CC (ex WSRD), FC to modern AC (Albany), CL change from Johnstown, NY, PC< 570w, 1050 ft, DA, SG "Z 104.9" (new calls likely soon)
 Babylon: WBAB 102.3 PC> 6 kW
 Buffalo: WLCE 92.9 adds Craig & Co.
 Carthage: WTOJ 103.1 FC to soft AC (&)
 Fredonia: W203AW 88.5 NS on the air (WCOT)
 Garden City: WLIR 92.7 PG> 2 kW, DA
 Hampton Bays: WVVY 107.1 CC (ex WVVV) "Y107" (New York)
 Lockport: W214BB 90.7 NS on the air (WCOU)
 Medina: W207BD 89.3 NS on the air (WCOU)
 Middletown: WRRV 92.7 PG> 6 kW, 269 ft, XG: 41-27-25 / 74-26-24
 Old Forge: WBKG 99.7 PG 1.4 kW, 676 ft, CL: Newport Village, NY, XC: 43-08-28 / 75-01-49
 Phoenix: WRDS 102.1 adds urban, 2pm-3am
 Warsaw: WCOU 88.3 PG< 4 kW, 535', DA

NORTH CAROLINA:

Avon: *** 106.7 XA: add class A
 Boone: W215AZ 90.9 NS-10w: WLFJ
 Calabash: WYNA 104.9 PG 23.5 kW, 338', DA
 Durham: WFNC 107.1 adds Tom Joyner
 Highlands: WHLC 104.5 PC> 460w, 1158 ft.
 Lexington: W206AV 89.1 NS-10w: WBFJ 89.3
 Salisbury: WEND 106.5 PC> 84 kW
 Shallotte: WCCA 106.3 FC to JRN classic country (&) (Wilmington)
 Tarboro: WFFX 104.3 adds Tom Joyner

OHIO:

Belpre: W223AD 92.5 on with WRRR 93.9
 Chillicothe: WKJ 93.3 PG< 43 kW, 532 ft., DA, XG: 39-37-17 / 82-53-13
 Defiance: WGDE 91.9 LC
 N. Baltimore: WIMJ 107.7 CC (ex WHMQ)
 Steubenville: WBJV 88.9 CC (NS)
 Tiffin: WCKY 103.7 CC (ex WTTF), FC to country "Buckeye"

OKLAHOMA:

Broken Bow: KKB1 106.1 SG "Best Country 106", CD Country (&)
 Clinton: KCLI 106.9 GA: to 106.7 - C2, CL: Okarche, OK

Oklahoma:

Eufaula: KCES 102.5 QC from 102.3, now C3, 10.5 kW, 505 ft, XC: 35-06-09 / 95-36-53, adds Radio 1 Country (&)
 Frederick: KYBE 95.9 PC> 6 kW, 249 ft.
 Guyton: K201EV 88.1 NS-213w: KHYM
 Healdton: KICM 93.7 GA: to C3, Krum, TX
 Idabel: KBEL 96.7 SG "Real Country"
 Pauls Valley: KGOK 97.7 GA: to Healdton, OK
 Poteau: KOMS 107.3 SG "Big Country 107.3"
 Sulphur: KIXT 106.1 QC from 100.9, PC< 2650w, 499 ft, XC: 34-39-03 / 96-59-24

OREGON:

Banks: KBBT 107.5 PC> 37 kW, 1443 ft, C1, XC: 45-30-58 / 122-43-59
 Bonanza: KAQX 102.9 NW, a/c "Kiss 102"
 Malin: KHAT 100.3 CC (NS)
 Phoenix: KAKT 105.1 adds Nashville Nights
 Portland: KXL 95.5 FC to urban "Jammin 95.5"
 Reedsport: KAUB 89.1 NW, AFA cont. Christ. (&)
 Springfield: KQFE 88.9 PC> 1250w
 The Dalles: K207CU 89.3 NS-8w: KAWZ-ID
 Tillamook: KTLI 94.1 CC (ex KJUN), NW, adult standards
 Tillamook: KJUN 104.1 CC (ex KTLI), FC to a/c

PENNSYLVANIA:

Ephrata: WRTL 90.7 NO-GX, exp 9/15/2000
 Erie: WJET 102.3 FC to modern AC "The Point"
 Hazleton: WXBE 97.9 CC (ex WZMT) "The Bear"
 Lancaster: WLCH 91.3 SG "Radio Centro"
 Lancaster: W263AC 100.5 NOT on, but W259AA 99.7 was, with WITF
 Lebanon: WQIC 100.1 noted off the air
 Mill Hall: WZRZ 98.7 FC to JRN soft AC "The River" (Williamsport)
 New Kensington: WZPT 100.7 adds Craig & Co.
 Oil City: WOYL 98.5 CC (ex WRJS)
 Philadelphia: WWDB 96.5 FC to news and talk
 Pittston: WSHG 102.3 PC> 5.8 kW
 Selinsgrove: WQSU 88.9 SG "The Pulse"
 Stroudsburg: WBYX 88.7 CC (NS)

RHODE ISLAND:

Woonsocket: WWWX 106.3 PG> 2450w, DA, XG: 41-59-43 / 71-26-53

SOUTH CAROLINA:

Aiken: WRXR 96.3 FC to R&B oldies "Kiss"
 Charleston: W220CN 91.9 NS-19w: WLFJ
 Hartsville: WHSC 98.5 FC to black gospel // WYNN (Florence)
 Orangeburg: WKSO 103.9 PC> 9.2 kW, 531 ft, C3, XC: 33-40-13 / 80-52-15
 Walterboro: WPAL 100.9 ND, XG: 33-04-16 / 80-21-31, CL: Ridgeville, SC
 Wando: W216BJ 91.1 NS-10w: WLFJ

SOUTH DAKOTA:

Aberdeen: KBFO 106.7 NW, hot AC (&)
 Lowry: KMLO 100.7 FC to ABC country // KPLO-FM
 Reliance: KPLO 94.5 FC to ABC country (&)
 Wessington Sps: KGGK 98.3 LC

96.1 RXR
 20 IT'S ONLY ROCK & ROLL.

TENNESSEE:

Covington: WKBL 93.5 CC (ex WKBQ), FC to adult contemporary
 Gallatin: WGFX 104.5 adds Rick & Bubba
 Graysville: WAYB 95.7 PC> 6 kW, 328', DA
 Nashville: WKDF 103.3 FC to country "Music City 103.3"
 Oliver Springs: WSMJ 98.7 CC (ex WXVO), FC to smooth jazz (Knoxville)
 Oak Ridge: WOKI 100.3 FC to classic rock (Knox.)
 Shelbyville: WZPC 102.9 FC to modern rock "The Buzz" (Nashville)

woki
Fm 100

TEXAS:

Alamo: KJAV 104.9 PG> 6 kW, 295 ft.
 Ballinger: KKCNC 103.1 FC to country (&)
 Beaumont: KYKR 95.1 inc. to 430 ft, class C, XC: 30-03-43 / 93-58-50
 Beeville: KVFM 91.3 CC (NS)
 Brownsville: KBNR 88.3 PC> 5.5 kW
 Cameron: "NS 94.3 OSA to 105.1 - C3, 10 kW, 328 ft.
 Carthage: KTUX 98.9 SG "99X Real Rock Radio"
 Comanche: KYOX 94.3 CC (ex KOXZ), NW, Real Country (&)
 Dallas: KRBV 100.3 FC to dance-CHR "Hot 100"
 Dallas: KLUW 98.7 XG: 32-25-19 / 96-58-05
 Decatur: KRNK 105.7 adds Tom Joyner
 Ft. Worth: KEGF 97.1 inc. to 1666', XC: 32-35-19 / 96-58-05
 Freer: KBRA 95.9 PG< 2.1 kW (cir), 397 ft.
 Gainesville: KODS 107.9 NW, regional Mexican // KDXX (Dallas)
 Giddings: KROX 101.5 PA: to Buda, TX
 Gilmer: KFRO 95.3 SD "Cool FM Oldies 95"
 Greenville: KIKT 93.5 adds Nashville Nights (&), SG "T93-5 The Rhythm of Texas"
 Hereford: KPAN 106.3 PC> 30 kW
 Highland Park: KVIL 103.7 XG: 32-35-19 / 96-58-05
 Kilgore: KKTIX 96.1 SG "96X The Classic Rock Station"
 Knox City: *** 107.3 GA: add class A
 Lamesa: KAXT 104.7 CC (ex KIOL), FC to country (Odessa)
 Levelland: KLVF 105.5 FC to southern Gospel
 Lubbock: KFMX 94.5 adds Bob & Tom
 Lubbock: KONE 101.1 inc. to 882 ft, XC: 33-26-31 / 101-52-40
 Lytle: KXPZ 91.3 FC to K-Love contemp. Christian (&) (San Antonio)
 Marble Falls: KBMD 88.5 CC (NS)
 Marshall: KCUL 92.3 SG "Pure Gold Oldies 92.3"
 Odessa: "NS 89.5 2 kW, 194 ft (AFA)
 Overton: KPXI 100.7 SG "Cool FM Oldies 100.7"
 Paris: KPLT 107.7 SG "Star 107 FM"
 Pt. Comfort: KAJI 94.1 NW, oldies (&) (Victoria)

FM NEWS PAGE 6**Texas:**

Refugio: *** 100.5 GA: add class A
 Rockport: KBTE 102.3 inc. to 446 ft, XC: 27-52-00 / 97-13-08
 San Angelo: K218CW 91.5 NS-85w(v): WPCS-FL
 Silsbee: KWDX 101.7 adds Radio 1 - country (&)
 South Padre Is: KESO 92.7 adds Radio 1 - modern (&) (McAllen)
 South Padre Is: KZSP 95.3 FC to smooth jazz (&)
 Stamford: KOES 106.9 NW, classic country (&)
 Tulia: KJMX 104.9 RA with JRN country (&)
 Tyler: KTYL 93.1 SG "93.1 Jammin' Oldies"
 Victoria: KAYK 88.5 1 kW, 157 ft, (AFA) CC (NS)
 Winsboro: KWNS 104.9 SG "Solid Gospel"
 Winters: KAFR 96.1 CC (NS)

KWNS
104.9 FM

UTAH:

Brigham City: KRAR 106.9 FC to soft AC // KOSY, also reported SI
 Centerville: KCPX 105.7 CC (ex KUMT), FC to classic hits (SLC)
 Logan: KUSR 89.5 LC
 Ogden: KYFO 95.5 inc. to 718 ft., XC: 41-14-59 / 112-14-11
 Roy: KSNU 107.9 FC to soft AC // KOSY
 Tooele: KUUV 92.1 CC (ex KMGU) "U92"

VERMONT:

Burlington: W213AZ 90.5 NS-80w: KLOV-FM
 Hague: WWFY 93.7 dec. to 289 ft., CL: Addison, VT, XG: 44-01-34 / 73-09-44
 St. Johnsbury: WBJU 88.5 CC (NS)

VIRGINIA:

Blacksburg: WBRW 105.3 CC (ex WVMJ), FC to classic rock
 Charlottesville: WUVA 92.7 dec. to 899 ft.
 Hoquiam: KGHO 95.3 FC to 70's oldies (&)
 Radford: WBXW 101.7 CC (ex WNRV), FC to classic hits "The Box" (Blacksburg)
 Warrenton: WTOP 107.7 noted with the Larry King Show, NOT // WTOP 1500
 Wise: WCVC 90.5 PG 70w, 669 ft, XG: 36-57-39 / 82-30-56

WASHINGTON:

Naches: "NS 99.3 930w, 830 ft.
 Nile: KLRO 88.1 LC
 Quincy: KGER 95.9 NW, religion
 Seattle: KZOK 102.5 PG> 67 kW, 2345 ft, DA, XG: 47-30-17 / 121-58-04
 Seattle: KIRO 100.7 adds Mark & Brian
 Shelton: KRXY 94.5 PG 710w, 955 ft.
 South Bend: KFMV 105.7 inc. to 951 ft, DA
 Spokane: KEZE 96.9 FC to hot AC "Star"

WEST VIRGINIA:

Princeton: WSTG 95.9 CC (ex WAEY), FC to hot AC "Star 95" (Bluefield)

WISCONSIN:

Antigo: WRLO 105.3 FC to classic rock (&)
 Augusta: *** 101.5 GA: add class C3
 Balsam Lake: WWLC 104.9 RA with ABC AC (&)
 Brillion: WXWX 107.5 CC (ex WEZR), FC to rock "The Fox" // WWWX
 Columbus: WTLX 100.5 ND, XG: 43-16-28 / 89-16-32
 Eau Claire: WVCF 90.5 PC< 900w, 312 ft.
 Kewaunee: WAUN 92.7 reported SI
 Oshkosh: WWWX 96.9 CC (ex WUSW), FC to rock "The Fox"
 Platteville: WPVL 107.1 SG "Oldies 107.1"
 Rudolph: WIZD 99.9 FC to oldies // WOFRM
WYOMING:
 Sheridan: KZVY 94.9 PG> 75 kW, 1207 ft, class C, XG: 44-37-20 / 107-06-57

GUAM:

Dededo: KGUM 105.1 LC

PUERTO RICO:

Lajas: WXLX 103.7 CC (ex WCFI) "X100"
 Ponce: WIOC 105.1 PC< 47 kW, -200 ft, XG: 17-59-27 / 66-37-45



CANADA

ALBERTA:

Grande Prairie: new application for FM station here, no more information yet

BRITISH COLUMBIA:

Victoria: CIOC 98.5 wants PG< 47 kW, increase antenna height

MANITOBA:

Winnipeg: CJAE 95.5 PG< 13 watts

NORTHWEST TERRITORIES:

Cambridge Bay: CFFB1 101.9 NW, variety // CFFB
 Kugluktuk: CFFB2 101.9 NW, variety // CFFB

ONTARIO:

Cornwall: CJSS 1220 QG to 101.9, 3 kW
 Kirkland Lake: CKJL 560 wants 101.5, 23 kW
 Newmarket: CKDX 88.5 PG> 11.3 kW
 North Bay: "NS 104.9 31 watts English language tourist station wanted
 Sunderland: "NS 89.9 NS-2.24 kW // CJKX wanted

The Legend
FM 104.7

KELOWNA'S BEST ROCK

PRINCE EDWARD ISLAND:

Summerside: CJRW 1240 wants 102.1 - 50 kW

QUÉBEC:

Havre-St. Pierre: *NS 92.5 25.3 kW station wanted here, // CBI-FM, would also delete 7 AM CBI relayers in the process

Ste-Anne-de-Beaupre: *NS 89.9 NS, 124 w wanted to be // CBVX-FM

Ste-Anne-de-Beaupre: *NS 96.7 NS, 124 w granted, // CBV-FM

SASKATCHEWAN:

Carrott River: *NS 88.1 13 watt station wanted
Moose Jaw: new FM applications being accepted, no additional information

PIRATE WATCH:

• **OAKLAND PARK, FLA.** The FCC, with cooperation from the U.S. Marshals service, closed down an unlicensed radio station here on January 15, 1999. The station operated on 89.1 and was known as "Vibes 89.1". The FCC release states that the station operated at "5,590 times in excess of permitted power levels for non-licensed broadcasts" (Does this mean 559 watts?)

• **LANCASTER, PENNA.** The 106.3 pirate here with Spanish language tropical music has been noted again. Power estimate is 50 to 100 watts.

• **Ken Simon** reports, via the "FM TX DX WEBLIST", that a new station guide covering the United Kingdom is available. The 1999 16th Edition of RADIO STATIONS IN THE UNITED KINGDOM (ISBN 09514723-8-0) is available from the British DX Club. It is a comprehensive 52 page directory of all MW and FM stations in the UK, covering all BBC, independent, and long-term restricted license stations. This year brings an additional feature to the guide: A supplementary guide to radio stations in the Republic of Ireland, including full details of the new RTE Lyric-FM transmitter. The guide is available from:

British DX Club
126 Bargery Road
Catford,
London SE6 2LR

Price is £3.00 / 7 IR's / \$5.00 (US) / DM 10. Price includes postage. For airmail service outside Europe, please add \$1 (US) or 1 IRC (International Reply Coupon). Recommended payment is UK Cheque / UK Postal Order payable to "British DX Club", Eurocheque payable in pounds sterling to the same, or IRCs.

• **Prairie Public Radio**, North Dakota State, and the University of North Dakota have combined their three radio services to create: **NORTH DAKOTA PUBLIC RADIO**. This affects many stations in that state, and creates a large network of affiliates: 90.5 Bismarck, 91.9 Beach, 91.9 Bowman, 89.5 Cary, 91.9 Crosby, 91.5 Devils Lake, 89.9 Dickinson, 91.9 Fargo, 89.3 Grand Forks, 91.9 Harvey, 91.9 Hettinger, 91.5 Jamestown, 91.7 Lakota, 88.9 Minot, 88.1 Thief River Falls, Minn., 91.9 Tioga, 89.5 Williston, 91.9 Plentywood, Mont.

North Dakota Public Radio

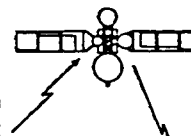
• **Mike Lazaro** sends a clipping from the *Albany Times-Union* about a recent format change in New York's Capital District. WSRD, 104.9 in Johnstown, NY, upgraded their facility (see recent FM NEWS columns), and moved to Altamont, closer to Albany proper. The station is now affiliated with WFLY 92.3 (Top 40), and changed their format to modern rock as WAAP, "Albany's Point". With the move to Albany, the station felt this format was a better choice: There were already several oldies stations in the market, WSRD's previous format (WTRY 98.3/980, and WXLE 104.5's new "Jammin' Oldies"), while the switch of WXLE to that format left somewhat of a void in new rock. There is one station to compete with: WQBK 103.9 "The Edge". This switch took place on March 10th. However, Mike has alerted me that since this, the station has changed slogans to "Z 104.9", saying that "The Point" was not received favorably as a slogan. I haven't seen a call change applied for yet, but stay tuned.

• **Paul Swearingen** sends an article from the March 24, 1994 *Washington Times* about KILI 90.1 Porcupine, S.D. (the article identifies them as being from Wounded Knee, S.D.), a 100,000 watt station run by the Ogalala Lakota Nation. Station Manager Tom Casey notes that the station covers 30,000 square miles, providing important local information, as well as a wide range of music. (Many East Coast DXers probably have heard this one coming in, playing traditional Indian music, and known that they had KILI without even waiting for the ID!) The station airs many local interest items for its coverage area, such as birth, marriage and death notices, tribal council meetings, and high school basketball games. As of the article in 1994, the station's music was traditional in the mornings, followed by contemporary Native American artists (like Bill Miller & Joanne Shenandoah) in the early afternoon. Afternoons

featured country and jazz music, while the evenings feature rock, rap, and Top 40. (I have heard similarly blocked programming on other Native stations, such as KINI-96.1-NE, and KMHA-91.3-ND). However, since the station takes many requests, the station may deviate from the format at any time! The mix has helped KILI develop a wide listening audience, and also has helped provide exposure to Native artists. A survey on one reservation found that 95% of the residents had tuned in KILI within the previous 24 hours (how many stations would love to have those numbers ☺). With the main transmitter,

and six translators, the coverage area includes 200,000 people, from Rapid City, to the Nebraska Panhandle. If anyone is interested more in this station, I recommend checking the Times' archives - it is a lengthy and very interesting article.

• **Thanks!** To Dave Nieman, Paul Swearingen, Mike Lazaro, Ken Simon, Saul Chernos, and M Street Journal of course, for assisting with this month's column by sending news items!

SATELLITE NEWS

GEORGE W. JENSEN
4604 ANNTANA AVE
BALTIMORE MD 21206-4220

Very few changes this month and a list of potential new services that may or may not see the light of day.

CHANGES

Satcom 1 - 17 - Madison Square Garden sports VC2

Satcom 3 - 5 - Odyssey will become more entertainment oriented

GE Americom - DELETE 1 - Fox Sports/8 - FOX Sports Chicago/14 - Fox Sports New England/16 - Fox Sports New York

Galaxy 3 - 21 - Gem Shopping Channel - now here

Telstar 7 1 - Feeds/8 - Fox/10 - Fox/13 - Fox Kids/14 ID Channel/17 - Fox Kids

Galaxy 7 C Band

add 756 - RAI International/757 - Art Net/delete - 904 - Access Entertainment Network on K-Band - delete - 800 - The Box Classics

GE Americom 2 delete - 3 - RAI International - now digital PanAm Sat 5 -

708 - now color bars

713 - new FM carried - Musicteca - Caracas, Venezuela 99.9 new unutilized channels - 740 - 746

THE NEW STUFF TO COME???

Do-It-Yourself/ Panfare/ The Fashion Network/ The Football Network/ The Gospel Network/ HBO Comedy/ HBO Zone/ Hobby Craft Network/ Interactive Channel/ Inspirational life/ International History Channel/ The Love Network/ The Martial Arts Action Network/ MasMusica TeVe/ Mas Musica Te Ve 2/ The MBC Gospel Network/ Oasis/ Orb TV/ The Outlet Mall Network/ Oxygen Channel/ Parent Television/ The Recovery Network/ Starz Cinema/ Starz Family/ The Theater Channel/ Uru TV - The Earth Cast Network and that's all.

Small column this time - hope there's more next month. See you in 30 - Good DX and '73's

George

Jeff Kruszka, Editor
5024 S. Braxton Ave.
Baton Rouge, LA 70817
JTKruszka@worldnet.att.net

May 1999

Here's some photos from new contributor Michael Condon, of Poynette, WI. Mike has an antenna on top of a 170 ft. tower (see below)! Can he pick up Monterrey, Mexico from there? We'll see...

Equipment: Home computer w/Micro Electronics TV Tuner card as receiver. CM 7 ft. screened UHF dish and CM 3671B VHF antenna on top of 170 ft. tower, with 3/4 hardline and RDX Labs amps.



KREM-2, Spokane, WA
1438 mi Es seen 6/13/98
@1730 CDT



KTVQ-2 Billings, MT
1000 mi Es seen 8/5/98
@1907 CDT



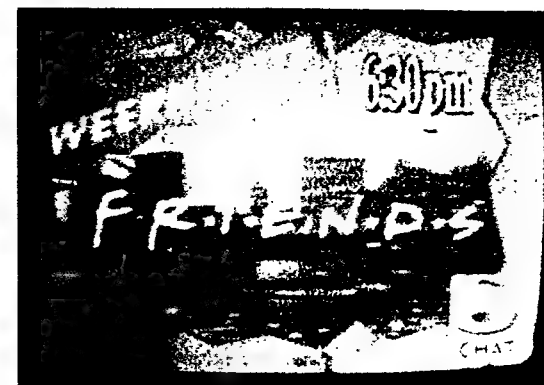
WXIX-19 Cincinnati, OH
420 mi Tr seen 8/19/98
@2200 CDT

Photo News

May 1999

Page 3

CHAT-6 Medicine Hat, AB
791 mi Es seen 6/29/98
@1303 PDT

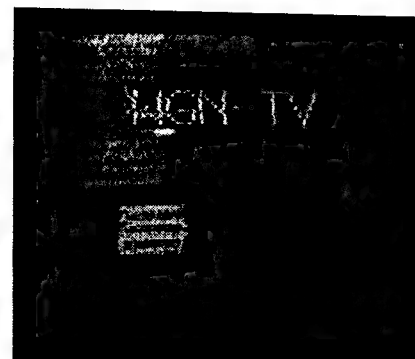


Now here's a couple of examples of "strange" reception from Bill Eckberg, Dixon, IL:

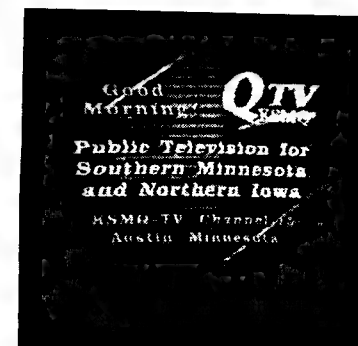
Equipment:

VHF - 1997 Orion color TV with CM 1110 @41'. Belden 300Ω leadin w/RDX Labs UA-60 balun.

UHF - 1990 Zenith AC-DC 9" color TV w/C.M. screened 7" dish @52' and RDX Labs UA-903 preamp. Jerrold RG11 cable. Rohn 48' crankup tower.



WYCC-20 Chicago, IL
88 mi Tr seen 5/15/98
@0010 CDT
"WGN testing HDTV?"



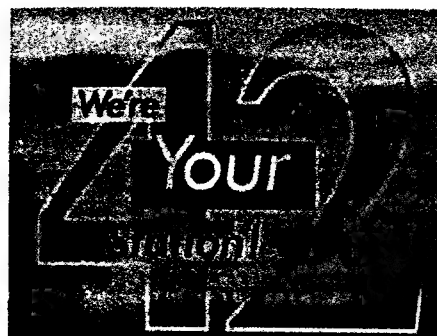
K41AD Lansing, IA
147 mi Tr seen 6/20/98
@0655 CDT
"one-channel-up phantom on ch. 42"

More from Bill next month.

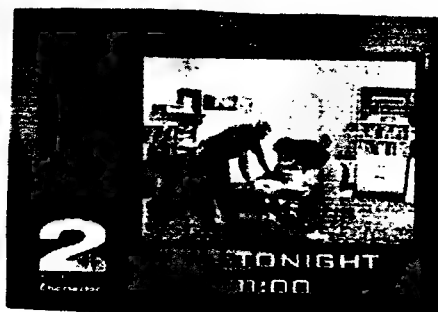
73s,

Jeff





KPTM-42 Omaha, NE
402 mi Tr seen 5/15/98
@1019 CDT



WCBD-2 Charleston, SC
958 mi Es seen 6/15/98
@ 1830 CDT



WYMT-57 Hazard, KY
580 mi Tr seen 8/19/98

Now for some stations that I've never seen before (!), from Randy Miltier, Ashland, OR:
Equipment: 19" Zenith TV, Antennacraft ch. 2-6 Yagi, HD-73 rotor.



CITL-4 Lloydminster, AB
967 mi Es seen 6/29/98
@1317 PDT



10 CANDLES

(This edition of "TV TIME TUNNEL" marks the tenth anniversary of the feature in the VUD. Column editor Tom Bryant offers some comments for the occasion.)

Time flies...

It's amazing, and hardly seems possible, that I have been editing this column for ten years.

At the onset my intent was to explore as many facets as possible pertaining to the history of the television industry. Hopefully that goal has been, at least to some extent, achieved.

Yes, I know there has been an overabundance of North Dakota material, but it was only natural to write about personal experiences and historic happenings in my home state. There will be a bit more of that, but the scope is continually widening.

As I assemble material each month, I am amazed at the amount of subject matter available. With the explosion of TV station home pages on the internet the supply is even greater.

Yet, I regret that much of the very best material cannot be published here. As you are well aware, the quality of photo reproduction attained with this printing process is at best poor; at worst horrendous. Pictures, however, are where some of television's best historical documentation exists. Yes, I use photos here occasionally, but realize that they aren't going to do justice to the subject.

Perhaps a wealthy DXer will remember WTFDA in his will and endow us with the kind of funding it would take to bring you a publication rivaling the quality of National Geographic. (Don't hold your breath...we're more likely to get a quad-hop to channel 2 in Hilo!)

I have another regret. Why didn't I find out about this organization (then known as the AIPA) in the mid 1950s when I started DXing? Thirty additional years as a club member would have been great.

So much for negatives. Let's reverse the polarity and go for the plusses...and there are many.

First, and foremost, the **FRIENDS**. I don't personally know as many of our members as I'd like, but of the fifty or so that I've met I feel like I meet a blood-relative every time I shake hands. I guess that's what fraternal organizations are all about. WTFDA just happens to create tighter bonds than most.

At this point, I want to single out one individual who has made the hobby even more challenging, exciting, and rewarding for me ... Doug Smith. Doug is a DXer's DXer. He's always willing to share his expertise. His contributions to the club are many; and his able assistance as co-host of the 1993 convention here in Nashville was invaluable.

Naming people for special recognition is always risky, because some are inadvertently omitted; however, I'll run the risk and mention that in the realm of WTFDA mainstays I tip my hat to Dave Nieman. He's usually behind the scenes but always ready to spring into action at a moment's notice. Bill Eckberg has supplied a lot of great historic articles and DX photos. Robert Williams' test pattern drawings are priceless. David Shapiro and Randy Miltier are frequent contributors. George Greene, Greg Coniglio, Matt Sittel, and Ernie Wesolowski have always been good sounding boards.

Then, there's just getting to meet and rub elbows with guys like Bob Seybold...Joe Gragg...and Bruce Elving. They, and so many other legends (and legends-to-be) are what make WTFDA tick.

Last, but not least, those who have volunteered to host conventions are automatically nominated for sainthood!

I'm proud to be in this organization; proud to share the heritage of the hobby; and pleased that I am allowed to contribute to the VUD.

The first ten years of *TV TIME TUNNEL* has been a labor of love. I can only hope that the next ten will be as much fun, as interesting, and as rewarding.

EASTERN TV DX

May, 1999

Russell Miller
HC 61, Box 86B
N. Amity, ME 04471-9622
email address - estvdx@ainop.com

LOCAL TIME UNLESS OTHERWISE NOTED

Roy Barstow, P.O. Box 2488, Teaticket, MA 02536

February, 1999

24 Tr	1300	CIVQ	15	PQ	361
	1330	CKTM	13	PQ	353
25 Ms	0334	CBHT	3	NS	408
	0455	CHAU	3	PQ	494
Tr	1520	CBHFT1	3	NS	279
26 Ms	0145	WKYC	3	OH	573
	0535	WKYC	3	OH	573
28 Au	1815	WSTM	3	NY T	
		Ant N with NBC - off			

March, 1999

03 Tr	0015	WHRO	15	VA	457
	0030	WYDO	14	NC	562
Es	1915	KMTV	3	NE	1311
	1920	KYTV	3	MO	1226
	1930	WRBL	3	GA	1007
		WISC	3	WI	968
	1940	KQTV	2	MO	1287
	1945	KSNW	3	KS	1447
	2013	KTBS	3	LA	1416
Ms	2312	WWAY	3	NC	660
04 Tr	2000	WSTM	3	NY	297
	2015	WORK	13	NY	371
	2030	CBOFT	9	ON	376
07 Ms	0443	CICA	12	ON	562
Tr	1215	CBOFT	9	ON	376
	1230	CHEM	8	PQ	353
	1900	CIVS	24	PQ	269
	1920	CFKS	30	PQ	269
	1930	CKTM	13	PQ	353
09 Es	1000	WCBI	4	Ms	1132
	1030	WATE	6	TN	813
	1045	WLBT	3	MS	1264
		WMAB	2	MS	1160
	1100	WSJK	2	TN	763
		WRCB	3	TN	909
17 Tr	1530	15, 27, 33, 43, 49	E, VA		
		W25, W41, W44, W60	Onancock, VA		
		W45BG	45	VA	456
	1535	WMGM	40	NJ	278
		W35BH	35	VA	450
		WQAV	34	NJ	250
	1600	W24BI	24	VA	450
		W40AH	40	VA	450
		W62CN	62	VA	440
		W19BM	19	VA	450
	2045	WUNM	19	NC	577
		WUNJ	39	NC	660
	2300	W36BK	36	VA	400
	2310	WSFX	26	NC	547.723
18 Tr	0730	WYDO	14	NC	562

18 Tr	WVEC	13 VA	455
Ms	1650 CKLT	3 NB	365
26 Tr	0513 CKTM	13 PQ	353

Is it March madness, or maybe two full moons in March, or just Roy the Boy playing with his toys! What's up Roy!! March is a transitional month and anything can happen. A little bit of everything visited my dungeon DX shack. Was pleasantly surprised to find CICA on my MS tape. A big TVO on slide and only TVO station on 12 with my local off. Playing with the R-7000 caught a few new Canadians. But the major contributor was the storm off to my east. It was pinwheeling bands of snow into ME and NH, cutting down their signal strengths to very low levels. On March 3, KSNW was only heard on the lcom. Remember those who have lcoms can reach out another 50 miles, so when one starts reaching his distant Es stations to check the radio. My wife does not understand DX'ing, and I may go around the house singing, "Supernatural Radio" by Tom Petty. She thinks I am a little bit too gone, but I am having much fun. Es of March 9 was only to TN and MS but was strong, up to S-9 40 db signal strength. Sap is rising in the trees as well as signal levels. So check out the TV and send those reports in.

Editor:

As many of you know, antenna phasing can have a great effect on nulling undesired semi-locals and even undesired DX stations during an opening. By mounting two antennas in such a way as to combine each antennas undesired signal 180 degrees out of phase, they thus cancel each other's signal. The success FM Dxxers have had with Andy Bolin's Phase Box demonstrates the benefits of this subject. Andy's Phase Box phases the signals "electrically". Another less practical method is to space two antennas various horizontal separation distances depending on what angle away from the "pest station" these antennas are bearing. This all being a function of wavelength. In many of my experiences with identical TV antennas mounted side by side, I have discovered one thing for sure. Store bought baluns or reversible 75 ohm feeds on 75 ohm antennas must be in phase to work as predicted, ex: to determine if the baluns are in phase, simply reverse one baluns 300 ohm leads and check it on a local or semi-local. If the baluns are in phase, the antennas should peak as expected while pointing at the local station. If the baluns are 180 degrees out of phase and both antennas are pointing at the local, then the local should disappear over a very narrow beamwidth coming back strong either side of the true station bearing. Naturally super strong locals don't

null as deeply as semi-locals when pointing at them with 180 degrees out of phase baluns, especially if your area has reflections or metal to interact with the antennas. But with parallel mounted identical antennas, especially single driven element yagis, 180 degrees out of phase baluns are capable of knocking a snow free station right "off the air". Likewise, this out of phase null also works straight off the rear of the two antennas. Antennas stacked one above the other on a single mast probably don't null as well as horizontally side by side stacked antennas, when baluns are 180 degrees out of phase). This is because of increased interaction between the two antennas when one is above the other with horizontal polarization. Anyhow, this 180 degrees out of phase system has it's benefits. Simply, point at the unwanted station to make it disappear. Who knows, maybe a double hopper in an Es opening will surprise you when you vaporize the unwanted Es signal or semi-local. Of course, a more practical method would be to use Any Bolins Phase Box as I believe it's capable of this and a lot more. Although I never used one, I have a copy of Andy Bolin's instructions for the phase box. I can't help but wonder if this (180 degrees out of phase baluns) is what Andy is referring to when he describes an "X" pattern when checking the directivity of his two antennas on a common rotor.(?)

TBN Affiliate Stations:

Maine

W17BF	17	Bangor
W17BJ	17	Danforth
W19BL	19	Dover-Foxcroft
W21BI	21	Farmington
W21BH	21	Machias
W17BN	17	Madawaska
W14BO	14	Medway
W18AY	18	Portland
W51AG	51	Presque Isle

Vermont

W16AL	16	Burlington
-------	----	------------

New York

W64BH	64	Albany
W26BS	26	Binghamton
WNYB	26	Buffalo-Jamestown
W14AZ	14	Glens Falls
W10BH	10	Jamestown
W20BA	20	Massena
W22AZ	22	Olean
WTBY	54	Poughkeepsie
W59BV	59	Rochester
W41AE	41	Utica

New Jersey

W36BJ	36	Atlantic City
W05AX	05	Cape May/Wildwood

Delaware

W68CQ	68	Dover
W40AZ	40	Wilmington

Maryland

W43BP	43	Cresaptown
-------	----	------------

Pennsylvania

W42BX	42	Erie
W54BO	54	Kingston
WWPS-LP	8	Hawley
W52BO	52	Meadville
W65CG	65	Pittsburgh
W18BN	18	Scranton
W42BJ	42	State College
W39BT	39	Williamsport

North Carolina

W69DC	69	Asheville
W68BL	68	Charlotte
W53BE	53	Fayetteville
W62OV	62	Gastonia
W59BA	59	Goldsboro
WLXI	61	Greensboro
W54BR	54	Greenville
W31AZ	31	Hendersonville
W51BL	51	Jacksonville
W52BM	52	Lumberton
W38BB	38	Raleigh
W53BF	53	Rocky Mount
W66ST	66	Statesville
W20AL	20	Wilmington

South Carolina

W18BF	18	Anderson
W40AW	40	Beaufort
W44AX	44	Charleston
W51BR	51	Columbia
WGGG	16	Greenville
W66BJ	66	Myrtle Beach
W52BK	52	Orangeburg

Georgia

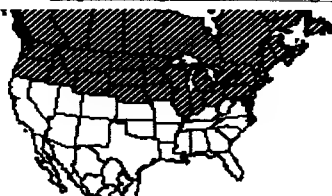
W23AC	23	Albany
W65BI	65	Augusta
W33AL	33	Brunswick
WELF	23	Dalton
W63AT	63	Hazlehurst
W52CL	52	Macon
W558M	55	Marion
WHSG	63	Monroe/Atlanta
W67BJ	67	Savannah
W48BH	48	Statesboro
W22BP	22	Thomasville
W20BF	20	Tifton
W66BW	66	Valdosta
W488Z	46	Waycross

NORTHERN FM DX

MAY 1999

DEADLINE: The 5th of the month before publication
LOG CUTOFF: 4 months from postmark
COLUMN REPORTING AREA: See map to the right
 (also includes Europe & Asia)

EDITOR: GREG CONIGLIO
 90 SLATE CREEK DRIVE APT. #3
 CHEEKTOWAGA, NEW YORK 14227
E-MAIL: coniglio@localnet.com
WEB: <http://www.geocities.com/~wgrc>



Another small column this time around. Not much DX has been reported on the Internet, either, especially in the northern areas that this column serves. I'd like to thank Rick Shafan for hosting this year's convention, in Northern New Jersey. I'm sure lots of us would love to see that antenna setup he's got there. Hope to see you there! ...

MATTHEW SITTEL - 1731 SCARBOROUGH DRIVE APT. 2-I - BELLEVUE, NEBRASKA 68123

Equipment: Yamaha TX-900U tuner with modified filters, rabbit ears, 2nd floor apartment.
 Internet:

MARCH 1999

23 Tr
 1659 KMNE 90.3 NE Bassett, ID 210
30 Tr
 0704 KPLO 94.5 SD Reliance, Chamberlain ad 273
 0707 KTSD 91.1 SD Reliance, SD Public Radio 273
 1639 KYQQ106.5 KS Arkansas City, Wichita ad 286

APRIL 1999

1 Tr
 0713 KGLS 93.1 KS Pratt, Hutchinson ad 282
 0717 KJLT 94.9 NE North Platte, g 251
 0728 KJIL 99.1 KS Copeland, area wx 342
 All loggings in this report are new!

FIRST TO KNOW NEWS

KHUB/KFMT

1340 AM 105.5 FM

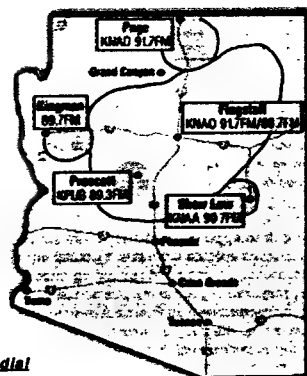
FREMONT

It's nice to be reporting again, and to a different DX column no less! I think it has been close to 5 years since my last DX report. And that was from Florida. Since then, I've moved 3 times, and also gotten married! My wife enjoys the DX hobby, believe it or not! I'm back working in meteorology again, and hopefully the job stability will be such that we'll be staying put for awhile. We hope to get a house and put up some real antennas soon, perhaps later this year. But even without that good a setup, the DX I've heard shows great promise. I hope to be a regular reporter, atmosphere willing! 73s Matt.
 (Matt, good to hear from you again! Thanks for your first report to NORTHERN FM DX after so many years to SFMDX. Looking forward to seeing more great DX in your new location!-gc)

COVERAGE MAP

91.7
88.7
FM

n p r



-courtesy Bruce Elving/FMedia!

SOUTHERN FM DX

John Zondlo - 4009 Driftwood Circle - Yukon, OK 73099
 E-mail: jpzondlo@aol.com - Deadline: 10th

For DXers in AL, AR, AZ, CA, CO, DE, DC, FL, GA, HI, KS, KY, LA, MD, MS, NC, NV, OK, SC, TN,
 TX, UT, WV and Mexico

MAY 1999

John Tudenham - W0JRP - 2824 Missouri -
 64804-2744 - jotud@iuno.com - CST
 Modified Onkyo tuner, 6 element Radio Shack
 yagi @25'

One new station in log, not much tropo lately,
 waiting for the Es season. Hope it is better than
 the last two years.

3/28 Tr
 1900 KPOW 97.1 MO LaMonte, ads for Sedalia MO,
 ID as "Power 97," classic r, MO
 #149



John Zondlo
 4009 Driftwood Circle
 Yukon, OK 73099
jpzondlo@aol.com
 CST

Akai AT-VO4 tuner (modified with 2 150 kHz IF
 filters), Channel Master Stereo Probe 9 antenna.

4/1 Tr
 0755 K203CS 88.5 OK Fairview, 48w bdlr of KJIL 99.1
 0855 KZQD 105.1 KS Liberal, SS, area spots 206



From the Editor

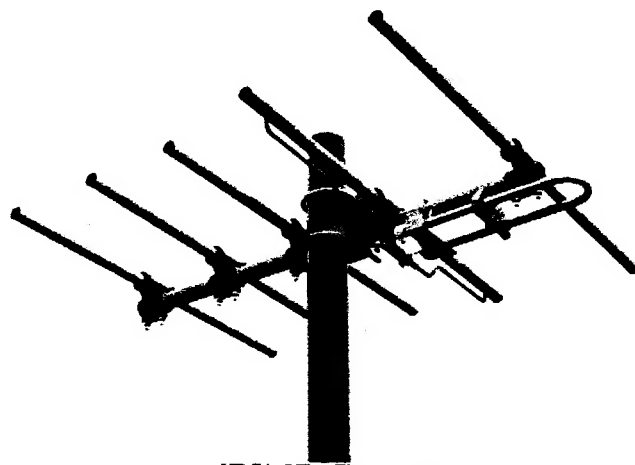
Small column this month, but I'm sure we'll see
 DX pick up enough in the next month to have a
 large column for June. I'm hoping that the good
 early tropo around here are a precursor to great
 skip....at least that's how it worked in 1994. I'd
 love to see another skip season like that!
 See y'all next month!

Check out FM DX Web!!!
<http://members.aol.com/fmdxweb>

**VOLUNTEER! DON'T JUST SIT THERE
 AND READ THE U.U.D.--PARTICIPATE!
 WTFDA is your club, and always in
 need of feature and technical
 material...let's hear from you
 today!**



Scala Electronic Corporation
HDCA SERIES VHF-TV/FM YAGIS
(Single Channel)



HDCA-5 Five Element Yagi
HDCA-10 Ten Element Yagi

APPLICATIONS:

- VHF-TV Reception
- FM Reception
- CATV Systems
- Translator Systems

SCALA

DESIGN FEATURES - SCALA HDCA SERIES YAGIS

RUGGED CONSTRUCTION: Because Scala HDCA yagis were designed with the professional and commercial user in mind, they are built for maximum durability and reliability and superior electrical performance. These rugged antennas are fabricated with anodized heavy-wall seamless 6061-T6 aluminum drawn tubing. The parasitic elements are made of 3/4" OD aluminum tubing with .049" wall. The booms are made of 1.050" OD aluminum pipe. The elements are mounted to the boom with heavy anodized aluminum castings. These castings are ribbed at the stress points, no welds, which anneal and weaken aluminum, are depended upon for mechanical support. All fastenings and hardware are stainless steel. This attention to mechanical integrity means that a Scala antenna will provide many years of service and will provide the user with real cost efficiency. Low-band models feature internal inserts in elements for extra strength and to minimize fatigue caused by resonant vibrations. Ten-element yagis for FM and low-band TV channels are furnished with diagonal boom braces for maximum reliability.

LOW NOISE LEVEL: Every precaution has been taken to eliminate the generation of noise from within the antenna itself. All parasitic elements, including the boom, are of one-piece construction. Feed points on driven elements are welded. There are no mechanical splices or outside sleeving to corrode and generate noise at a later date. The low noise factor and gain remain stable throughout the life of the antenna.

EXCELLENT TRANSMISSION LINE MATCH: The HDCA series yagis provide a maximum VSWR of 1.5:1 across the specified channel. Scala's exclusive balun design provides a stable transformation from the unbalanced coaxial feedline to the balanced dipole feed. For trouble-free service, the rugged all-brass balun is sealed against moisture accumulation.

EASY ASSEMBLY: All Scala HDCA yagis can be easily assembled in a few minutes. All necessary hardware and assembly instructions are furnished. All yagis include stainless steel U-bolt assemblies an heavy aluminum castings for attachment to a circular support with an outside diameter of 2" to 2-3/8".

CHOICE OF CONNECTORS: While Scala recommends the use of 75-ohm N type connectors for optimum performance and reliability, the HDCA yagis are available with UHF or F connectors at no extra cost.

STACKING HARNESES AND ACCESSORIES: HDCA yagis may be stacked in various arrangements to increase gain and to modify patterns. Scala can supply coaxial stacking harnesses for two-bay and four-bay arrays which provide optimum impedance matching and lowest loss. Contact Scala for stacking dimensions and for information on methods of arranging antennas for maximum front-to-back ratios and for reducing co-channel interference. Polar pattern plots for HDCA yagis are available from Scala on request. In addition, Scala offers factory-assembled coaxial line assemblies to the customer's length and connector specifications. These custom-made cable assemblies eliminate the problems and inconvenience often encountered during field assembly.

ELECTRICAL SPECIFICATIONS

Frequency Range: Any specified VHF-TV Channel (2 through 13) or
Any specified FM Channel (88 through 108 MHz)
Impedance: 75 ohms (50 ohms with optional transformer)
Maximum VSWR: 1.5:1 across specified channel
Front-to-back Ratio: 14 dB
Input Power Rating: 250 watts
Polarization: Horizontal
Termination: N, F or UHF type female

Nominal gain over dipole:	HDCA-5	HDCA-10
Channels 2 and 3	6.75 dB	8.75 dB
Channels 4, 5, 6	7.50 dB	9.50 dB
FM Channels (88-108)	7.50 dB	9.50 dB
Channels 7 through 13	8.00 dB	10.0 dB

About antenna gain specifications: Scala HDCA yagis give maximum possible gain evenly distributed across the specified TV channel. This flat response is critical for good color television performance. There are no peaks that look good on a field strength meter at the sacrifice of critical signal information. Keep this in mind when comparing gain specifications with other antennas. The nominal gain figures listed above are over dipole. Add 2.14 dB to determine gain over isotropic (dbi). Five-element yagis for FM and low-band TV channels are available with rear (cantilever) mounting at extra cost. Five and ten-element high-band yagis are available with extended booms for rear mounting at slightly higher prices.

MECHANICAL SPECIFICATIONS.

Dimensions and weights of HDCA yagis vary with operating or frequency selected. Typical values are listed for the largest antennas (lowest frequencies) and smallest antennas (highest frequencies) in the five-element (HDCA-5) and ten-element (HDCA-10) models. For specific information on other channels please contact Scala.

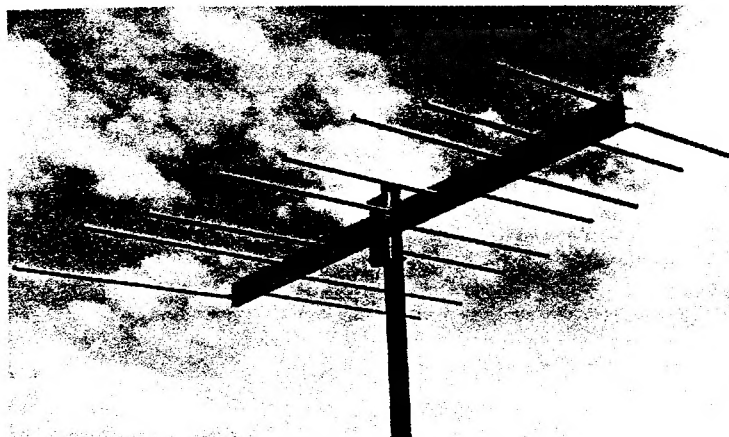
	Width	Length	Wind Thrust*	Approx. Ship Wt
HDCA-5 (Channel 2)	106-1/2"	95-1/8"	157	19 pounds
HDCA-5 (Channel 13)	28-1/4"	25-5/16"	42	9 pounds
HDCA-10 (Channel 2)	109"	197-7/8"	323	40 pounds
HDCA-10 (Channel 13)	30-1/4"	54-11/16"	90	15 pounds
HDCA-5 (98 MHz)	62-1/4"	56-3/16"	100	14 pounds
HDCA-10 (98 MHz)	63-7/16"	109-13/16"	205	30 pounds

*Thrust in pounds with 1/4" radial ice and 100 MPH wind.

ORDERING INFORMATION:

Specify Scala HDCA-5 or HDCA-10 yagi antenna. Indicate operating channel for any VHF-TV channel (2 through 13) or operating frequency for any FM channel in the 88-108 MHz band. Specify connector type (75-ohm N type, F type or UHF type).

Scala Electronic Corporation
CL-FM BROADBAND COLOR LOG
Available in 50 and 75 ohm models



Scala CL-FM Log Periodic Antenna

APPLICATIONS:

- FM Reception
- CATV Systems
- Precision Monitoring
- Translator Services

SCALA

The Scala CL-FM Color Log is a broadband frequency-independent log-periodic array specifically designed to meet the exacting requirements of professional users of FM antennas. Careful design and quality control results in an extremely rugged antenna offering superb electrical performance, even under severe environmental conditions. Gain flatness across the 88-108 MHz spectrum is held to $\pm 1/2$ dB.

Scala's unique combination of double booms and flexible transmission line allows us to take advantage of larger active regions, resulting in higher efficiency. This log-periodic design provides improved co-channel rejection due to the high front-to-back ratio and minimal side lobes. In addition, the CL-FM offers high immunity to the detuning effects of ice and snow, as compared to parasitic arrays such as yagis.

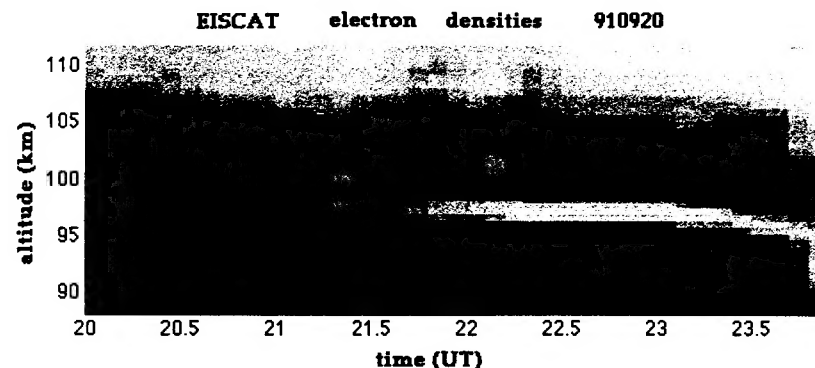
The CL-FM uses booms made of two-inch square 6061-T6 aluminum tubing. The elements are 3/4" anodized 6061-T6 tubing laminated over 5/8" tubing which in turn is fastened to 1/2" aluminum studs which thread into the booms. The design affords long term reliability, yet facilitates element replacement if required. Careful attention to mechanical reliability and low-noise electrical performance have made Scala Color Logs the choice of those who demand the best.

CL-FM Color Logs may be stacked for increased gain and directivity. Scala offers two and four-bay broadband stacking harnesses for such applications. The CL-FM is designed with mounting clamps and cable termination at the antenna weight center. This arrangement provides maximum strength, lowest tower load, and simplicity of installation. Mounting hardware is provided for attachment to a circular support with a maximum OD of 2-3/8".

ELECTRICAL SPECIFICATIONS

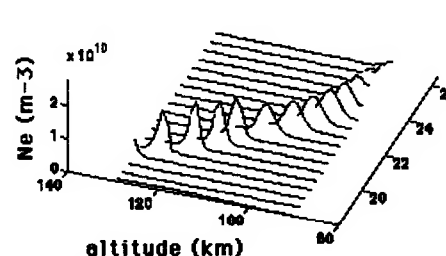
Frequency Range:	88-108 MHz (Broadband)
Impedance:	50 or 75 ohms
Polarization:	Horizontal
Gain (over dipole):	7.0 dB
VSWR:	1.4:1 Maximum

Sporadic E and sudden neutral layers

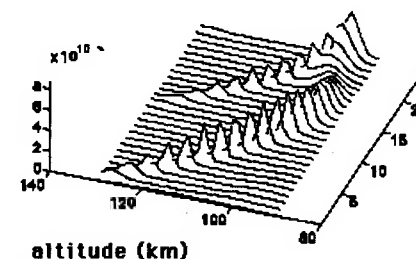


The picture above shows a typical sporadic-E (Es) layer measured by EISCAT in northern Scandinavia. Sporadic E layers are very thin (a few 100 m) layers of metallic ions which form in the upper atmosphere. The particular layer illustrated above was mostly composed of magnesium ions (Mg+) - we know this because a sounding rocket equipped with an ion mass spectrometer flew through the layer. On other occasions, other metallic ions may dominate, e.g. iron (Fe+), calcium (Ca+) and sodium (Na+). The layer above was also accompanied by a thin layer of neutral iron atoms (observed by resonance lidar).

simulation 1-
Es formed by electric field



simulation 2-
Es formed by semidiurnal tide



In many cases, the formation of Es layers can be explained by the combined action of electric fields and tidal winds on the broad distribution of metallic ions which results from meteor ablation. This is illustrated by the simulations above. No satisfactory explanation has yet been found for the correlation of Es with neutral metallic layers - the winds and electric fields act as layering mechanisms only for ions and the known processes of chemical conversion from ions to neutrals are too slow to explain the very rapid formation of neutral layers sometimes observed.

In the case at the top of the page, however, the measured winds and electric fields cannot explain the formation of the layer, although the rapid descent of the layer to below 90 km altitude at the right hand side of the plot is due to a sudden increase of the electric field to almost 200 mV/m (southward). In addition, the associated neutral iron layer was seen for about half an hour before any Es was detected - which is difficult to explain in terms of the neutral layer being a secondary result of the ion layer.

In addition, the Es layers are rather common at the location of EISCAT so there are good possibilities to continue the search for a complete explanation

BBC Engineering Information

Better Television Reception

Aerial Installations

Television waves travel in straight lines rather like light rays and do not bend much around obstacles. Consequently, wherever you live, your receiving aerial should be outdoors as high as possible and in the clear, so that it gets the best direct signal.

It is extremely important to use a good quality aerial from a reputable manufacturer as unbranded aerials can very often give poor results on some of the channels covered by the aerial. Most aerials used are of the Yagi type (Fig 1) consisting of a main boom with several straight rods across it. The more rods (elements), the higher the gain and the sharper the aerial directivity becomes. A Yagi with between 10 and 18 elements will generally give good results.

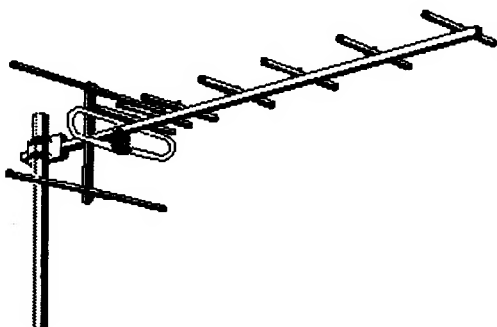


Figure 1: A standard 10 element yagi TV aerial, shown mounted for horizontal polarisation

Your aerial should be of the correct group and carefully positioned to obtain optimum reception on all television channels. Sometimes this may mean a high gain aerial (Fig 2) with mast head amplifier (booster). Failure to fit a good quality aerial often leads to poor reception on one or more channels. As television reception can vary dramatically over distances of a few feet or even a few inches, the precise location of your aerial can have a big influence on the quality of reception you obtain on each of the channels. A good way to mount the aerial is on a crank shaped, stand off pole, allowing sideways movement of the aerial during installation. Vertically polarised aerials must be fixed to the pole using an end mount behind the reflector like the aerials in Fig 1 & 2, the U shaped support bracket on some larger aerials interferes with the aerial's pick up pattern when mounted vertically.

A skilled aerial contractor should position the aerial so that all channels are received equally well. In technical terms, he should measure the sound and vision components of each television channel on his meter, and the vision to sound ratio should be close to 10:1 on each of the channels. If it isn't, you may get 'buzzing' on captions, interference patterns on pictures, as well as errors on teletext. In extreme cases, it may not be possible to obtain acceptable reception of all five channels using a single aerial. One solution may be to use two aerials - one carefully adjusted for good pictures on, say, BBC1 and Channel 4 (S4C), the other optimised for reception of BBC2 and ITV/Channel 5. Two separate downleads would be needed, selected by means of a special change over switch fitted near the TV set.

Better Television Reception

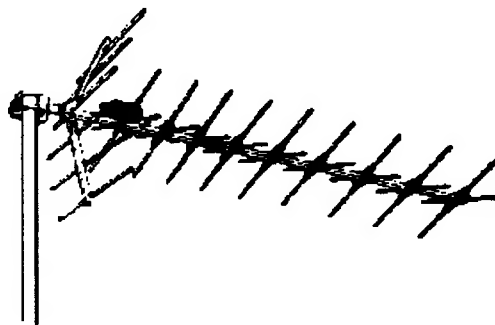


Figure 2: A high gain yagi aerial. Note the X shaped elements and the complex reflector

Outdoor aerials do not last indefinitely and if your reception has begun to deteriorate, it could be due to corrosion of the cable connections inside the junction box. The aerial may even have been knocked off alignment or broken by strong winds or a rather heavy bird! Inspect the aerial for mechanical damage, and check the cable download to make sure it has not deteriorated or been broken. Sunlight can cause it to become brittle, while the ingress of water causes a large loss of signal to the TV set. Aerials and downleads may need replacing more often in exposed or industrial areas.

Standing Wave Patterns

In addition to the direct signal from the transmitting station, your aerial can receive signals reflected from the nearby ground or other surfaces. These signals can add or subtract from the direct signal, giving stronger or weaker signals at your aerial. Known technically as 'standing wave patterns' they are different on each of the channels - because of their different wavelengths. So reception may be poor, with 'snowy' or 'speckled' pictures on some of the channels, because the aerial is positioned at or near a minimum signal point. In general, the patterns change over only a foot or two and are more pronounced on the highest frequency channels. Roof materials such as tiles with metal trace elements, wire netting over thatch, and other metallic roofs can cause reception problems, so your aerial should be mounted three or more feet above and well clear of the roof.

Reflections or 'Ghosting'

Ghosting on a TV picture is caused by reflected signals from hills, tall buildings, cranes, etc, arriving at your aerial a tiny fraction of a second after the direct signal from the transmitter. These delayed or ghost signals appear to the right of the main image on the screen. A good directional aerial is needed to reject the unwanted signals. If these come from the general direction in which the aerial is pointing, the more complicated type of aerial design having X shaped elements and a complicated reflector array at the back like Fig 2 can be effective. If the ghost signals are from the sides and rear of the aerial, the log periodic type or the 'Grid' type made from a rectangular grid of wires with four X shaped elements on one side, are often better (see Fig 3).



Figure 3: A grid aerial, shown mounted for vertical polarisation

Next Stop: Northwestern New Jersey



**The 1999 WTFDA
Convention will be held
in northwest New Jersey.
All calendars in your home
should be highlighted for
July 16-18, 1999.
MARK YOUR
CALENDARS
NOW!!**



The recommended lodging facility is:
Days Inn/Ledgewood, 1691 Route 46 West, Ledgewood, NJ 07852
Tel. 973-448-1100
You can also book lodging by credit card at any of the major
reservations secure websites.



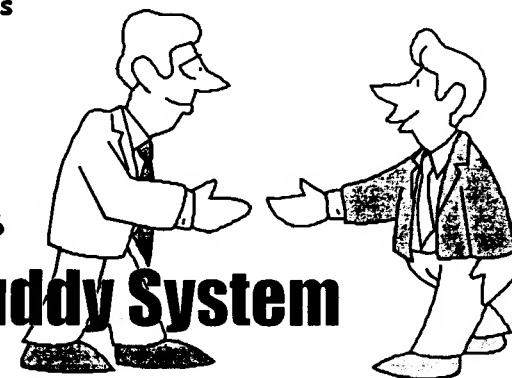
Lodging at the Days Inn/Ledgewood begins at \$69.00 plus tax.
This is NOT a special club discount.
Convention registration is \$25.00. This includes food, beer, soda,
soda, more soda (and more food).
All convention registration payments MUST be made to
Mountaintop Media.



TO PRE-REGISTER:
E-mail Rick Shafran at shafran@ptd.net, or, if you don't have e-mail
access, his mailing address is: Box 578 Sparta NJ 07871
You can also contact Rick at either address for further information.
REMEMBER, when making payments for the convention, be sure
checks and money orders are paid to Mountaintop Media.

Your WTFDA Marketing Board
Introduces

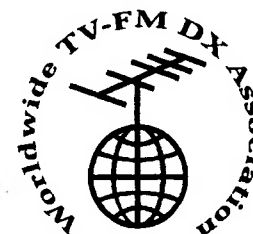
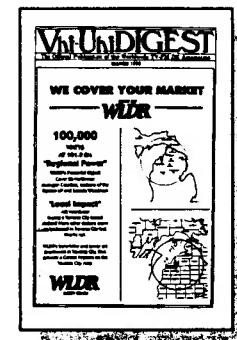
The Dxr's Buddy System



Now you can be a dxer's buddy, by sponsoring a TV/FM dxer that lives in a financially disadvantaged part of the world. Some people in second & third world countries that are TRUE dxers, are limited financially. By joining the Dxr's Buddy System, you can give your buddy a one year (or more) membership in the Worldwide TV/FM DX Association. Not only will it increase the joy of that persons interest in dxing, you'll also be spreading the word about TV/FM dxing to the world. And then there's the possibility of being named the Dxr's Buddy of the Year....

Your buddy also receives the VHF-UHF Digest for a full year (or longer), which can really make them feel like they belong to the WTFDA. They get on the road to learning even more about the hobby they love, where they can be in touch with other persons that like the same activity they do.

One day, someone might say to you,
"Thanks for being my buddy!!"



To get an instruction sheet and form for the Dxr's Buddy System, e-mail marketing team leader Jim Thomas at oldwest@oneimage.com, or, mail him at 280 E. Katsura Street, Milliken, CO 80543

If you'd like to know about someone you can sponsor, e-mail Mike Bugaj at ikon@netcom.com.

The world is waiting for YOU to be someone's buddy!!